ARCHAEOLOGICAL INVESTIGATIONS AT 30 HISTORIC SITES
CHIEF JOSEPH DAM PROJECT, WASHINGTON

by

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The technical findings and conclusions in this report do not necessarily reflect the views or concurrence of the sponsoring agency.

Office of Public Archaeology
Institute for Environmental Studies
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1984

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ABSTRACT

In 1979 and 1980 under contract with the U.S. Army Corps of Engineers, Seattle District, the Office of Public Archaeology at the University of Washington investigated 30 historical sites. On-site examination, mapping and photographing was supplemented by archival research, informant interviews and study of historical documents. Two sites, 45-OK-182H (Blackburn Homestead) and 45-DO-202H (Condon Ferry) required subsurface investigation. Of particular interest were buildings, recognizable concentrations of objects (such as refuse dumps), scatters and buried objects. When a Chinese coin was found at prehistoric site 45-DO-211, subsurface investigations were conducted in the historic component, designated 45-DO-210H. However, no definite evidence of Chinese influence was found.

The 30 sites included five allotments, nine placer mines, 12 homesteads, three ferry crossings and a burial marker. Evidence indicates that the area was settled by homesteaders and miners in the late nineteenth and early twentieth century. The ferries and associated buildings that served the miners and homesteaders were installed during this same period. The last mine was abandoned during the 1950s and most homesteads by shortly after World War I. Improved roads and bridges made the ferries obsolete by 1930. Remnants of homesteads, mines, allotments and ferry landings suggest that, in general, these enterprises were modest.

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The writing of this report was a cooperative effort. Bryn Thomas, who directed the site investigations and conducted the informant interviews, wrote the first draft, including the regional synopsis and the individual site descriptions. Marilyn Hawkes contributed the introductory chapter and parts of the project strategy and regional synopsis chapter, and extensively edited the remainder of the draft. Lynn Larson, who analyzed the artifacts from excavated sites, added the discussion of the analytic procedures and incorporated the artifact assemblage descriptions into the site descriptions. Marilyn Morrison drew preliminary versions of the site maps, Melodie Tune and Bob Radek the finals. James Bennett drew the artifact illustrations. Helen Mundy-Hudson and Marc Hudson edited the text; Dawn Brislawn typed the text and coordinated production. The final camera-ready copy was produced by Natalie Cadoret, Patricia Ruppe, Charlotte Beck, Pippa Coiley, and Julie Tomita under the direction of Sarah K. Campbell.

1. INTRODUCTION

Professional archaeological interest in historic cultural resources has grown rapidly in the last decade, spurred by the enactment of a comprehensive, integrated body of federal statutes, regulations, and guidelines designed to protect significant cultural properties threatened by either natural or human agencies. As steward of the cultural properties under its jurisdiction, the U.S. Army Corps of Engineers, Seattle District, undertook a comprehensive program of cultural resource inventory, assessment, and impact mitigation in response to an anticipated ten-foot pool raise behind Chief Joseph Dam. These investigations, which were carried out by the University of Washington's Office of Public Archaeology (OPA) under two separate contracts with the Corps (DACW67-77-C-0099 and DACW67-78-C-0106), encompassed both prehistoric and historic cultural remains. The current report, describing the results of survey and salvage studies of historic properties, is one of a series of reports issuing from this Corps-sponsored research.

The project area is located in north-central Washington along a 45-mile reach of the Columbia River between River Miles (RM) 545 and 590 in Okanogan and Douglas counties. Several previous archaeological investigations had been undertaken in this same area as a consequence of original dam construction and planning for the proposed second powerhouse (Osborne 1949; Osborne et al. 1952; Leonhardy 1970; Lyman 1975; Munsell and Salo 1977). Although most of this earlier work focused on reconnaissance of prehistoric sites, inventory survey efforts by Washington State University (Lyman 1975) and the Corps (Munsell and Salo 1977) identified 42 historic sites. The overwhelming majority of these were within the guide-taking lines of the proposed pool raise. Reconnaissance undertaken by OPA in the fall of 1977 under Contract DACW67-77-C-0099 added several sites to this inventory. Much of this work provided helpful background for our research. The sites described in this report are shown in Figure 1-1. Because most of them were expected to be damaged or destroyed by the pool raise, investigations were undertaken to determine both their cultural significance and the need for further mitigative efforts. Consequently, all historic cultural properties located within the Corps' guide-taking lines were assessed by means of mapping, photographic documentation, structure and feature description; and, at some sites, surface collection and limited subsurface testing. This on-site information was supplemented by a review of pertinent literature and informant interviews.

The following chapters are organized as follows. The second chapter deals with the strategy and tactics of historic site investigations employed at the Chief Joseph Dam Project. It outlines both data recovery and data analysis procedures and identifies biases that might affect study findings.

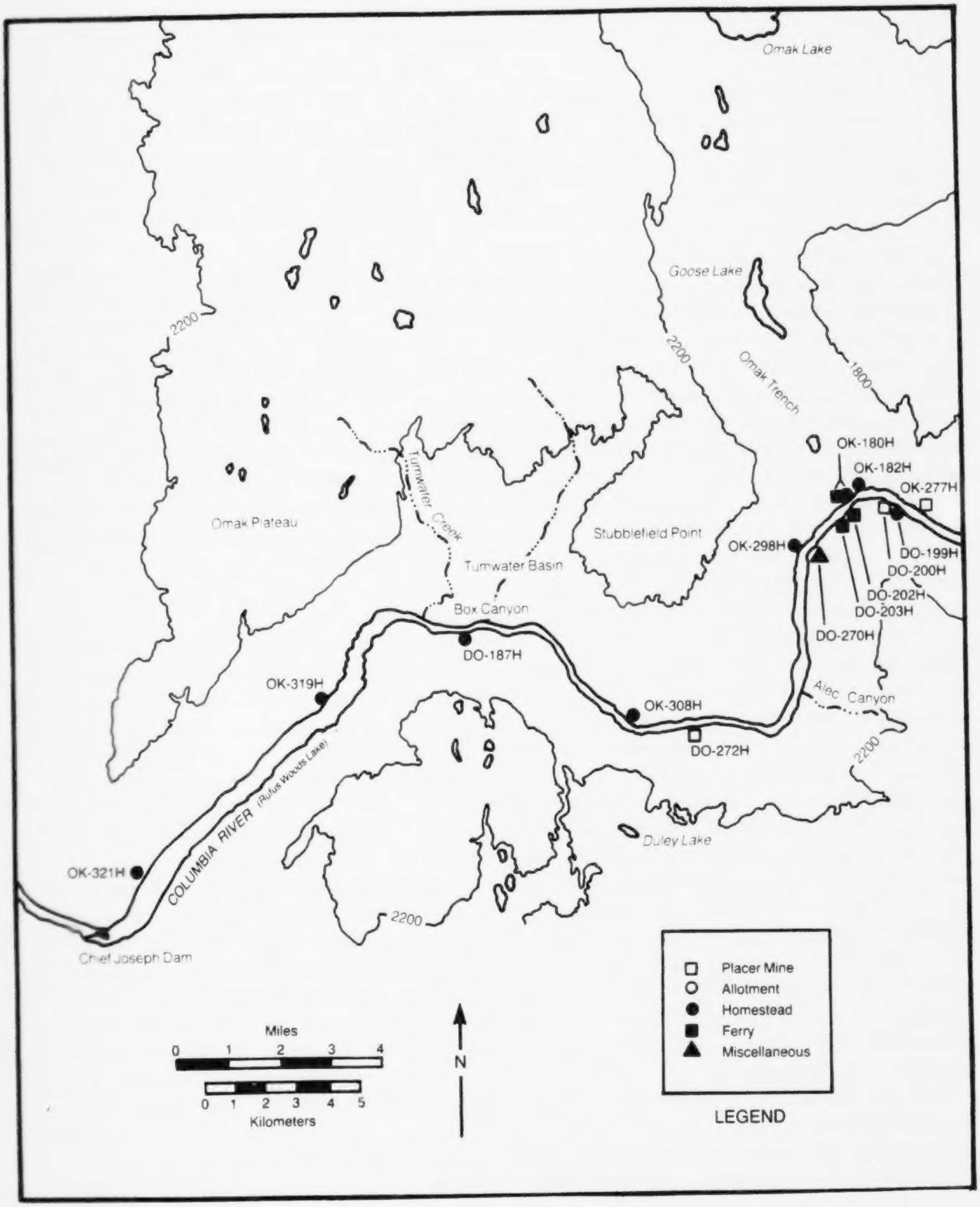
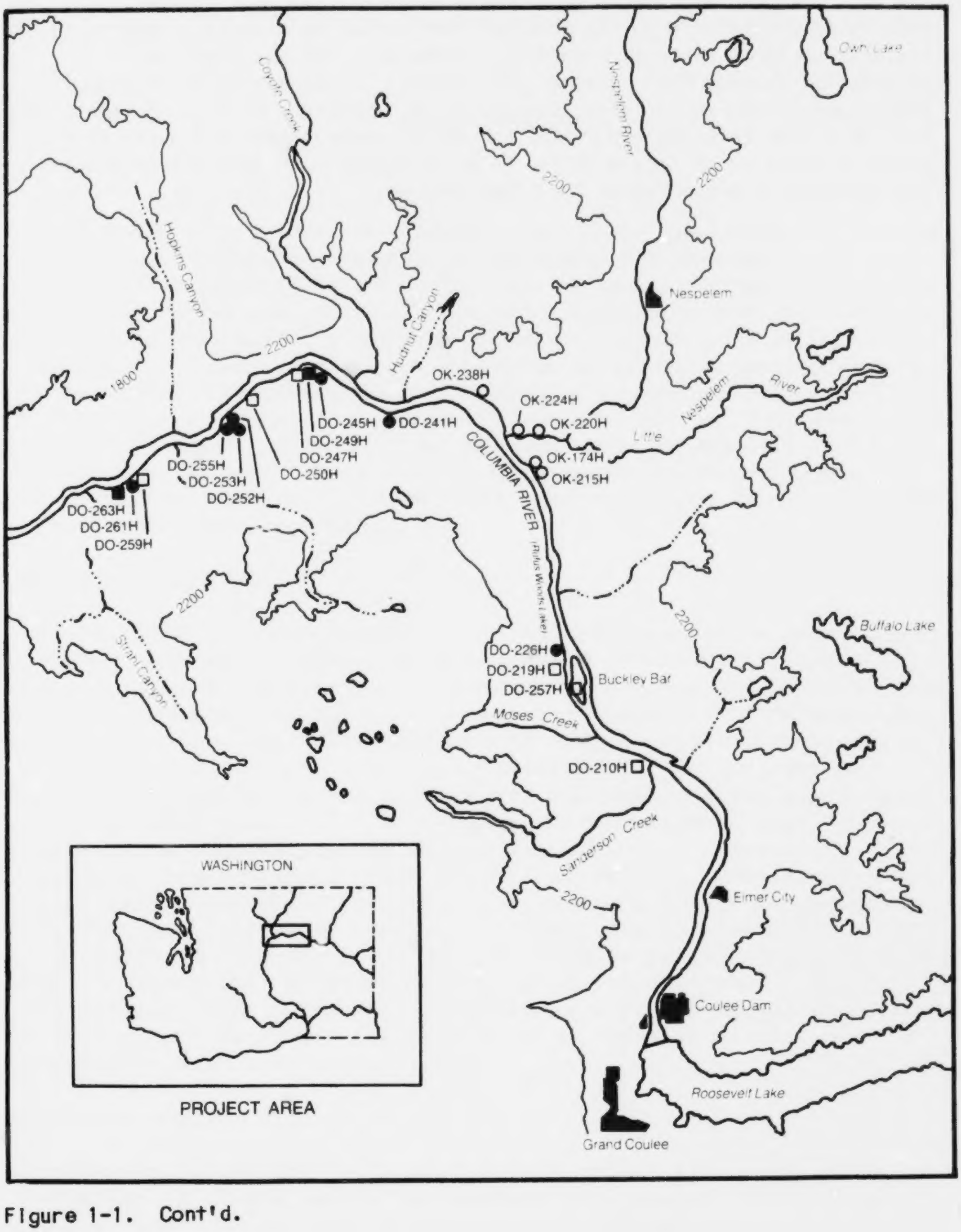

Omak Lake
Goose Lake
Omak Trench
2200
1800
Omak Plateau
Tumwater Creek
Tumwater Basin
Stubblefield Point
Box Canyon
OK-180H
OK-182H
OK-277H
OK-298H
DO-199H
DO-200H
DO-202H
DO-203H
DO-270H
DO-187H
OK-319H
OK-308H
DO-272H
Alec Canyon
COLUMBIA RIVER (Rufus Woods Lake)
Duley Lake
OK-321H
Chief Joseph Dam
Miles
0 1 2 3 4
0 1 2 3 4 5
Kilometers
N
Placer Mine
Allotment
Homestead
Ferry
Miscellaneous
LEGEND

Figure 1-1. Historic sites investigated in the Chief Joseph Dam project area.


Owhi Lake
Coyote Creek
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2200
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2200
Hopkins Canyon
Hudnut Canyon
Nespelem
1800
OK-238H
OK-224H
OK-220H
DO-245H
DO-241H
DO-249H
DO-247H
DO-250H
DO-255H
DO-253H
DO-252H
DO-263H
DO-261H
DO-259H
COLUMBIA RIVER
Little Nespelem River
OK-174H
OK-215H
(Rufus Woods Lake)
2200
Strahl Canyon
2200
Buffalo Lake
DO-226H
DO-219H
DO-257H
Buckley Bar
Moses Creek
DO-210H
Sanderson Creek
2200
Elmer City
Coulee Dam
Roosevelt Lake
Grand Coulee
WASHINGTON
PROJECT AREA

Figure 1-1. Cont'd.

The third chapter provides a general review of project area history, describing several historical "themes" that helped us classify elements in the historic cultural resource inventory. These are: the allotment and reservation system, early mining, particularly placer mining by Chinese, homesteading, and early river transportation. Chapters 4, 5, 6, 7, and 8 each provide a more detailed background for one of these themes and describe the historic sites which relate to it. A brief summary of the findings and their implications is presented as the final chapter.

2. PROJECT STRATEGY

Historic sites in the project area were investigated by means of on-site, ethnographic, documentary and archival techniques. On-site assessment techniques included mapping and photographing each above-ground building, structure, and feature; describing the layout and condition of the site; and, any measures recommended to mitigate the effects of pool raise behind Chief Joseph Dam. Evidence of structure and content at most sites was concentrated at the surface. Two sites, 45-OK-182H (Blackburn Homestead) and 45-DO-202H (Condon Ferry), however, required subsurface investigation. Published historical accounts, public records, and material in the archives of the Bureau of Indian Affairs were examined for clues to site ownership and function. Interviews were conducted with local informants, many of whom were direct descendants of pioneers.

ARCHAEOLOGICAL SOURCES

According to standard practice in historic archaeology, we refer to the component parts of historic sites as "features." Attributes of these features, such as condition and age, were easily determined because most were above ground and so were easily visible. Simple inspection of features was often sufficient to establish function since most were readily recognizable structures or objects with contemporary counterparts. For purposes of analysis and description, the features were organized into four categories: buildings, structures other than buildings, portable objects, and miscellaneous (including buried objects). Of particular interest to researchers were buildings, recognizable concentrations of objects (such as refuse dumps), scatters of objects (lacking the definitive boundaries of concentrations), and buried objects (often very well preserved). The relationships among objects, such as fruit trees in proximity to buildings and tools, were important in determining and dating site function. A more detailed description of the four categories and their sub-components is found in the project's management plan (Jermann et al. 1978) as well as in individual discussions in later chapters.

HISTORICAL SOURCES

Examination of published histories and other documentary and archival sources was an integral part of our historic site research. Two kinds of sources, researched published accounts and published oral histories, contributed to our understanding of both general area and specific site history.

Published research about the region includes general accounts of important developments, such as homesteading, mining, reservations, transportation and the Tribal Land Allotment system. Most of this material is too general or describes a time frame too brief to shed much light on the history of specific sites. However, published reports, journals, reminiscences, and maps by early fur traders, military personnel, and surveyors contain some valuable specific material. The General Land Office's "General Description" of each township includes data about topography, vegetation, soil and settlement patterns from the turn of the century (Appendix A). County land records list homesteaders and the types of patents issued for specific sites and the Bureau of Indian Affairs Archives contain records of the Tribal Land Allotment system on the Colville Indian Reservation.

Published oral histories of the area include early pioneer reminiscences. Our main source for Okanogan County was the quarterly magazine _Okanogan County Heritage._ Our Douglas County source was a single volume, _Pioneers to Power: Historical Sketches of the Grand Coulee Dam Area_ published by the Bicentennial Association Project. These publications contributed some site-specific data as well as general information about the region's recent history.

ETHNOHISTORICAL SOURCES

Ethnohistorical accounts document recent events in the project area from an anthropological perspective. Two published accounts of the historic period in the project area we used are _Ethnic Impact of the Events Incident to Federal Power Development on the Colville and Spokane Indian Reservations_ (Ray 1977) and "Ethnohistorical Component of the Chief Joseph Dam Burial Relocation Survey" (Miller 1979). While both studies contain general information about recent history on the Colville Reservation, only Miller's work mentions specific sites in the project area. Informant interviews were conducted with several land owners, who supplied information about specific sites and suggested other sources of information about site history and function.

EXCAVATION METHODS

Between November 1979 and January 1980, crews of five people each excavated two historic sites (45-DO-202H) and 45-OK-182H) as well as the historic component of project prehistoric site, 45-DO-211. This third excavation (45-DO-210H) was included because a fragment of a Chinese coin was found during excavation of 45-DO-211, leading to speculation that the site may have been used by Chinese miners. Since Native Americans commonly used such coins as decorative items, excavators hoped to find other artifacts that would help define how the site was used. Site 45-DO-202H was the location of Condon Ferry, an important Columbia River crossing that supported a small settlement. Since few surface remains were visible, subsurface excavations were undertaken in order to assess site contents. Site 45-OK-182H was locally known as the

Blackburn Homestead or the Chinese Dugouts. The possibility that the site might have been a Chinese miners' camp encouraged subsurface investigations.

Test excavation followed standard archaeological procedures for prehistoric sites. In addition, written reports and interviews were used to locate structural remains and to identify the function of subsurface features. Surface collections were conducted at both sites prior to subsurface investigation. At 45-OK-182H, artifacts were collected from the interior of both structures and at 45-DO-202H, 10 units were placed to sample the subsurface evidence of the hotel, saloon, saloon cellar and root cellar.

For the purposes of subsurface investigations, a Cartesian grid system in 4 m intervals was placed over the entire surface of 45-DO-202H. An arbitrary datum point was established in the front portion of a building, whose rock foundation was intact. An additional datum point was located 25 m to the west on a line parallel to the river. At 45-OK-182H, the four units were arbitrarily placed and oriented with reference to two datum points set 40 m apart along a magnetic north-south axis.

At both sites, test pits were dug in order to sample structural contents and identify structural remains. Artifacts associated with buildings and other structures or concentrations were left _in situ_ until further excavation required they be removed. At that point, they were described in field notes and/or mapped. The features were mapped and photographed during and after excavation. Field crews dug units in arbitrary 10 cm levels in the saloon cellar and root cellar units of 45-DO-202H until they encountered sterile deposits. They excavated remaining units at the site in 10-cm contour levels because the cultural material was concentrated from the surface to 10 cm below it. Excavators dug all units at 45-OK-182H in arbitrary 10 cm levels. They removed the soil matrix by skim shovelling and/or trowelling, and screened it through 1/8 in mesh screen whenever possible. In November and December 1979, however, the soil was sometimes frozen and had to be broken up by hand.

ARTIFACT ANALYSIS

In the laboratory, artifacts were segregated into categories by material type--glass, ceramics, metal, wood, leather, plastic, paper and miscellaneous. Artifacts such as window glass, nails, scrap metal, bottle and vessel glass fragments, and ceramic fragments were assigned a lot number within each level and unit and cataloged by that number. All other artifacts were cataloged by individual number. Because the artifacts from 45-DO-210H were collected as part of prehistoric excavations at 45-DO-211, they were cataloged as miscellaneous. The artifacts were not given individual numbers, but were roughly separated into lots of the same material types by level and unit. All artifacts were weighed individually or by lot number. Most artifacts were measured and their diagnostic attributes noted and/or sketched. A few artifacts, such as newspaper and catalog fragments, were treated with vinylite resin in the field or in the laboratory. Other artifacts, either too fragile or unwieldy to be stored, such as the base of a barrel or keg, were assigned a catalog number, weighed, measured, sketched, described and discarded. Thereafter, analysis of each artifact varied according to the nature of its material type. Major categories of artifacts found at the historic sites are described below.

BOTTLE AND VESSEL GLASS

Glass fragments were divided into groups of vessel glass, including bottles, glassware and lamp chimney glass. Bottle glass fragments were further separated on the basis of color, type of contents and type of manufacture. These criteria usually indicate a broad date range; a precise reckoning is more difficult to make. Although we have used dates of manufacture as the dates for the bottle glass in the collections, the manufacture date and the dates of use and/or discard are not necessarily identical. Discrepancies may occur as the result of the travel time from the place of bottle manufacture to the place of product manufacture and/or to the retail outlet. Shelf life of a product and the reuse potential of a bottle will also affect its longevity. Despite the Pure Food and Drug Act of June 30, 1906, prohibiting the refilling of bottles (Adams et al. 1975:113), people found other uses for an empty bottle for example, moonshiners reused bottles during the Prohibition (1920-1933) as they do today.

Most bottles in the collection were machine made, although a few were blown in molds. None were free blown. Automatic machine blowing began in 1903 with the development of the Owens Bottle Company's automatic machines; by 1914, 172 Owens machines were in operation, each capable of producing 40 bottles a minute (Munsey 1970:33). Machine-produced bottles have seams extending the length of the bottle and neck and no pontil scars. The earliest automatic machine-made bottles often have an uneven suction cut-off scar that may also spread over the heel of the bottle. These diagnostic features are evident in many of the bottles we recovered.

The bottle closures in our collection are mainly corks. Some may have had clamps or balls holding them in place, although there is not much evidence of this in our sample. Crown cap closures, abundant in our collection, came into use in 1895 and continue in use today (Fremont National Forest n.d. n.p.). The two canning jar closures recovered include a Mason jar type and an Economy closure. Figure 2-1 shows various bottle lip and collar types identified at 45-DO-202H (Condon Ferry), at 45-OK-182H (Blackburn Homestead) and at 45-DO-210H.

Although bottles may be used for many purposes, they were manufactured as containers for certain products. The original contents therefore offer a convenient way to classify them. The containers in our sample are divided into alcoholic beverage; soft drink, juice and mineral water; drugs and cosmetics; unknown contents; and canning jars. If condiment or food jars were found, they were not readily identifiable. The above classes were further divided into types based on the manufacturing mold, glass color, and collar shape.

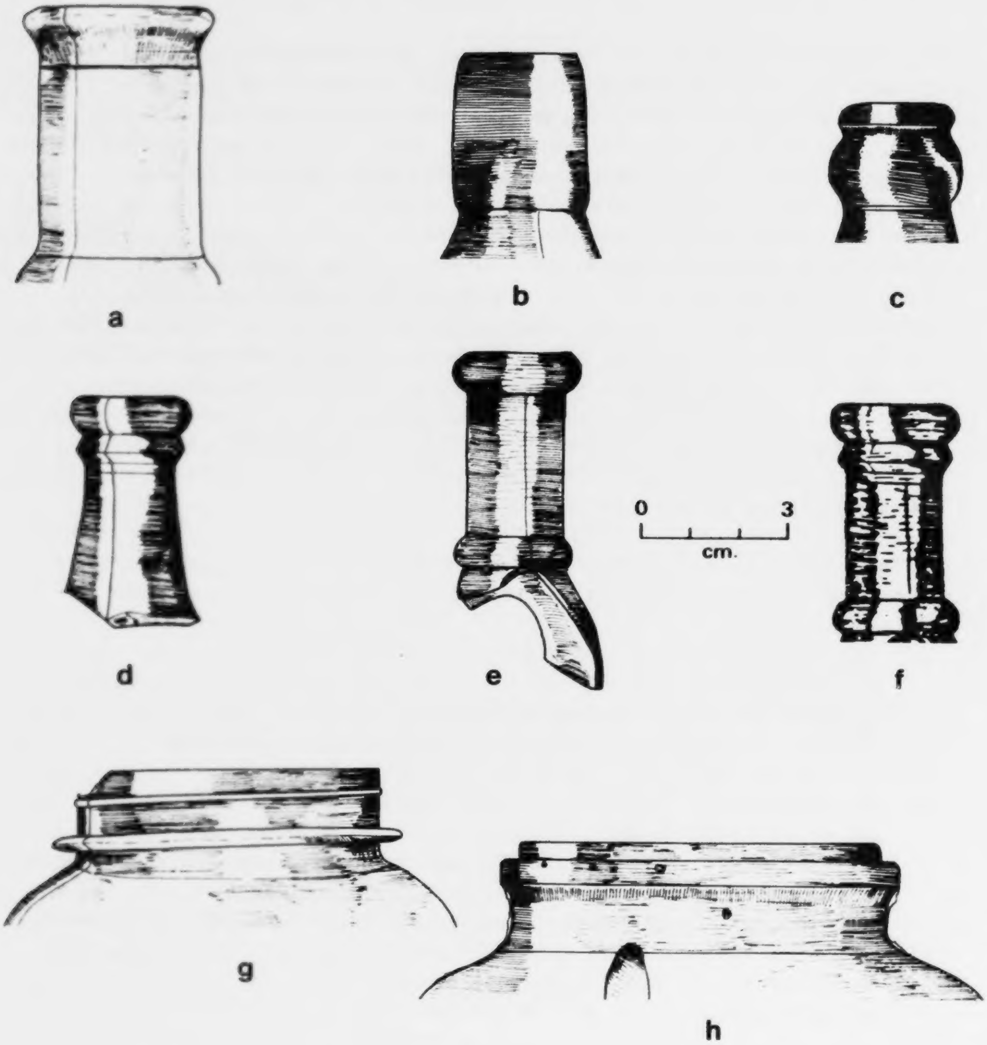


Figure 2-1. Bottle lip and/or collar types identified at 45-DO-202H, 45-OK-182H and 45-DO-210H.

a. Flared lip
b. Cylindrical collar
c. Crown lip
d. Double-ring lip with rounded collar
e. Rounded collar with ring at base of neck
f. Double-ring lip with rounded collar and ring at base of neck
g. Mason jar closure
h. Economy jar closure

CERAMICS

The ceramics class was divided by type of paste and by surface decoration. The main paste types in our sample include earthenware, stoneware, and porcelain and include some subtypes of earthenware and porcelain. Definitions of these pastes and their surface decorations follow Durrenburger (1965), Chance and Chance (1976) and Saastamo (1971).

1. **Earthenware.** This opaque paste is white, buff or gray in color and both soft and porous. Hardpaste earthenware is less porous and its paste a brighter white. Both earthenware types are commonly found in utilitarian whitewares and usually include everyday tableware such as plates, cups, saucers and serving bowls, or other household items like chamberpots. The hardpaste earthenwares developed by different companies, carry labels such as Stone China, Royal Stoneware, Ironstone China and White Granite, Semi-Porcelain and Hotel Ware (Sprague 1980:39). Although some of the project fragments are likely hardpaste, no identifying trademarks were found.

Surface decorations on the earthenware types in our collection were applied by the following methods, sometimes in combination.

a. **Transfer printing.** To use this method, a piece of linen paper, which has been pressed against a copper plate with the etched pattern, is placed on the surface of a bisque (fired once but not glazed) vessel, and the pattern rubbed onto the vessel.

b. **Decalcomania.** In this process, the pattern was printed on a layer of thin tissue paper. The tissue paper or decal was then coated with an adhesive, backed with heavier paper, dampened and placed against a glazed vessel. When the paper was peeled off, the decal remained on the surface. Because the decals were placed over the glaze, the surrounding area appears more glossy and the design eventually rubs off (Sprague 1980:19). This method was used on cheaper wares.

Decalcomania transfers came into general use in England in 1880 but were not popular in the United States until 1900 (Ramsay 1939). Sprague (1980:20) also discusses the use of "transfer films" in the 1900s. These were applied in the same manner as decals, but were fired, evaporating the film and leaving the mineral design on the glaze. They could then be touched up with paint to imitate handpainted floral motifs.

c. **Handpainting.** As the name indicates, a design is applied manually rather than by mechanical means. A handpainted design may be combined with decals, transfer printing, gilding or repousse.

d. **Gilding.** Gold and gold leaf were applied as accents and in bands on the inner rim and/or base with handpainting and repousse.

e. **Repousse.** A pattern or design in relief shaped by hammering and pressing from the reverse side. This method of making a molded relief pattern became popular after 1850 (Sprague 1980:26).

2. **Stoneware.** A stoneware paste is harder and more compact than either earthenware paste. The color of a stoneware paste ranges from off-white to gray , and although the paste is vitreous, air bubbles are often visible. Jugs, crocks and ale bottles were often made of stoneware. Although none of the stoneware shards in our collection bear surface decorations, a few were salt-glazed. In this process, salt is thrown on the vessel while it is being fired, resulting in a pitted surface not unlike an orange rind.

3. **Porcelain.** Porcelain is the most vitreous of the three paste types and includes a hardpaste and softpaste category. The latter is distinguished by a non-porous, granular, and slightly glassy appearance while hardpaste porcelain has a pure white, highly vitreous and usually translucent appearance. The same techniques of surface decoration used on earthenware apply to porcelain.

METAL

Metal artifacts were segregated into categories of nails and other construction fasteners; tin cans; cartridges; and, a miscellaneous category including clothing fasteners, harness fittings, stove parts, and other metal items.

Nails and Other Construction Fasteners

Square-cut nails and modern wire-cut nails were segregated on the basis of their historic development, although they were probably used simultaneously from 1890-1920, at least at Condon Ferry (45-DO-202H). The two nail types serve the same function. Square-cut or square nails, named because they were cut from a sheet of iron and therefore are rectangular in cross section, were handwrought in the United States until 1800. After that date, machine-cut square nails began to replace handwrought nails for all but a few purposes (Fontana and Greenleaf 1962:50). Machine-cut square nails probably did not penetrate the far reaches of the frontier very rapidly. Most settlers made their own nails or commissioned the local blacksmith to make them. By 1888, the square nail's popularity had begun to wane as wire nails began to dominate the market. The wire-cut or round nail is manufactured by cutting steel wire into lengths and adding heads. Fontana and Greenleaf (1962:49) note that by 1888, wire nails "represented a little less than one-fifth of the total nail product"; by 1895, wire nails "represented just under three-fourths of the total nail output" of the United States. A momentary resurgence in the square nail industry came in 1900 when settlers in rural areas increased their demand for square-cut nails because shingles secured to barn roofs with wire nails had begun to blow off (Fontana and Greenleaf 1962:50). The wire nail industry immediately countered by producing a large-headed, galvanized roofing nail. By 1902, the square nail industry was effectively eclipsed. Since that time, square nails have only been produced for special purposes.

Square-cut nails were manufactured in a variety of types and sizes. They were normally used for specific construction purposes, but preference on the part of the builder and availability of the required nail size probably determined use.

In our collection, only those square nails that could be measured and/or assigned a functional type were analyzed in the sample. We used shape and size of head, length of shank, and, shape of shank in cross section to identify the square nail by type. The common cut and hinge nail were the only types of square-cut nail identified in our collection. Diagnostic characteristics of the common cut nail are a bevelled shank, a rectangular shape at the cross section of the point, and a rectangular head that tapers to meet the shank. The hinge nail also has a bevelled shank with a rectangular point. The head is rectangular and slightly raised or reinforced. A hinge nail is also characterized by a taper in the shank immediately below the head.

The first wire nails were quite small and used mainly for picture frames, cigar boxes, furniture and mouldings (Fontana and Greenleaf 1962:42). By 1890, when wire nails had begun to outnumber square-cut nails, a variety of larger sizes had come into use. Nelson (1963:n.p.) quotes an 1888 article in which the advantages of the new wire nails are lauded. The article describes 13 varieties, ranging in sizes from 2d. to 60d. Although wire nails became the dominant nail type in the 1890s, many builders, for reasons noted above, preferred square-cut nails well after the turn of the century (Nelson 1963:n.p.).

Basic wire nail features have changed little since their inception although the variety of types has increased. The earliest wire nails may be distinguished by slightly bulbous heads set unevenly on the shank. Because "these nails are usually manufactured from steel wire, which is held in gripper dies and headed" (Nelson 1963:n.p.), each round nail bears the marks of the gripper die on the shank below the head and usually has a four-facet point caused by the cutter die.

The numerous wire nails in our collection were categorized by measuring the shank and examining the head. Fragments of nails or those too corroded to identify were excluded. In addition to the common diamond point, two shank types are present in our collection. The butterfly point is a defective diamond point with one or two fins projecting from the shank's point; the ball point has a spherical point on the shank of the nail and a diameter equal to its shank. The ball point end is presumed to indicate later manufacture. We identified five wire nail types and a miscellaneous group in our collection:

1. **Common.** This nail is also called a "standard nail" in both the 1900 and 1920 Sears and Roebuck Catalog. It was available in sizes between 2d. and 6d., the thickness of the wire increasing as length increased. The

common nail is still used today in scaffolding, house framing, crate building, or in any construction in which appearance is less important than speed of assembly (MacKercher 1979:129).

2. **Finishing.** This finer nail is distinguished by a small flat head and conically shaped sides sloping toward a point. Finishing nails are driven flush with the wood, leaving no depression around the head, so that a coat of paint makes the head invisible. The Sears and Roebuck Catalog of 1900 listed the available sizes for finishing nails as 4d. to 10d. There is a probability that some of our nails identified as finishing nails may be flooring brads. Flooring brad nails have larger heads, but when slightly corroded, may be indistinguishable from a finishing nail. The only flooring nails available in the 1900 Sears and Roebuck Catalog were 8d. and 10d. While Sears catalogs would not have been the only source of wire nails in the project area, the catalog listings are most likely representative of what was generally available at the time.

3. **Brad.** A brad is a small finishing nail with a rounded head flattened on top. It is used to make small articles such as boxes and picture frames and also in inconspicuous places in furniture.

4. **Roofing.** A roofing nail is a short galvanized nail with a wide flattened head.

5. **Barrel nail.** A barrel nail has a flattened head and is available in 1 1/8 in and 1 1/4 in (Stern 1967:4).

6. **Miscellaneous Nails.** One type of nail not associated with building was found at one site (45-Do-210H). This nail, the Hungarian or hob nail, was used primarily on the bottoms of mountain climbers' boots, miners' boots, and other shoes requiring extra traction. Fontana and Greenleaf (1962:64) report that sizes were figured in eighths of an inch, ranging "from 2 1/2 /8 to 5 1/2 /8." The 1902 Sears and Roebuck Catalog advertised only 3/8 in stout and 3/8 in fine, however.

Tin Cans

Although the tin can collection at the project is not large, it contains a variety of types. Tin cans were not predominant in American markets until the 1890's even though this process of preserving food was first introduced in England in 1834 (Hunt 1959:8). The identifiable tin cans and fragments of cans were assigned to the following types.

1. **Hole-in-top can.** This early canister was formed around a cylinder and the seam soldered or folded. Separate pieces for the top and bottom were then cut and also soldered. The ridge of solder on the seams usually stands out in relief, often as much as 1/8 in (Fontana and

Greenleaf 1962:68). Chance and Chance (1976:199) note that tin cans recovered from 1880s deposits at Fort Vancouver have lead soldered seams.

The name of this can came from the method used to insert the contents. First, the food product being preserved was forced through a small hole in the top and a small cap was soldered in place. A small hole in the sealing cap allowed gases to escape. Later this hole was sealed with a small drop of solder. The hole-in-top can, with certain closure variations, persisted until the 1900s (Fontana and Greenleaf 1962:69).

2. **Open-top can.** This type of can is essentially an earlier version of the modern day tin can. It is distinguished by crimped ends and a locked and lapped seam with no soldering. Open-top cans began replacing hole-in-top cans in 1902, but were not common in the industry until 1922 (Fontana and Greenleaf 1962:73). Within a decade, open-top cans were virtually the only top-opening cans manufactured. By 1936, capacity and sizes for open-top cans had been federally standardized by size and capacity.

3. **Sardine can.** This flat, oblong can is opened with an attached key that rolls a scored strip from the rim of the can. It was developed in 1895 and first applied to double-seamed cans in 1906. The key opening continued to be used on the fully automatic machine-made, oblong cans that appeared on the market in 1918 (Fontana and Greenleaf 1962:71).

4. **Resealable can.** These cans are like the open-top cans except they have reusable lids which overlap the edges of the can. These cans were and are used for dry food items, like spices or baking powder; and, for non-culinary items, like paint or tobacco.

5. **Condensed milk can.** The original soldered condensed and evaporated milk cans are identifiable from their caps and bases, which are not depressed but have a "flush" profile like their modern counterparts. Milk companies also standardized their can sizes at an early date and changed the hole-in-top to a smaller "match stick" size filler sealed with a drop of solder (Fontana and Greenleaf 1962:74).

6. **Tagger can.** "Tagger" is the metal industry's name for thin sheet metal or thin tin plate and is applied to a paint or kerosene can, round or rectangular, with raised pouring spout and screw cap. Tagger top cans were first made in England, but an American acquired an English patent in 1873 (Fontana and Greenleaf 1962:74) and introduced this reusable and returnable can to the American market.

Cartridges

Cartridges were identified individually by matching those in our collection with drawings and descriptions in Cartridges of the World (Barnes 1980) and with the aid of David Munsell (personal communication 1983). They will be discussed individually in this report.

BUTTONS

Buttons were assigned to a separate category and they too will be discussed individually.

3. HISTORICAL SYNOPSIS

Euroamerican history in the Chief Joseph Dam Project area commenced with the visit of David Thompson, a trader and explorer, who navigated the Columbia River from its source to the Pacific Ocean in 1811. On this journey, undertaken for the Northwest Fur Trading Company, he founded Spokane House, a fur-trading post on the Spokane River. Also in 1811, David Stuart of John Jacob Astor's Pacific Fur Company established Fort Okanogan at the confluence of the Okanogan and Columbia Rivers. From this time until 1855, fur-trading was the dominant Euroamerican activity on the Columbia Plateau, although missionaries, explorers, and military personnel were also present. Itinerant missions were begun in the 1830's to provide religious services to the trading post personnel and to proselytize the Indians: permanent missions were established soon after.

During the first half of the 19th century, none of the Euroamerican activities on the Columbia Plateau were aimed at comprehensive settlement of the region (Meinig 1968:485). Trading posts, missions, and military posts were relatively temporary or specialized occupations established to promote specific kinds of interaction with the native inhabitants. Posts were few and distant, and their location was conditioned in part by Native American settlement patterns and transportation routes.

Historic records indicate no Euroamerican settlements in the project area during the fur-trade era. The closest fur-trading posts were Fort Okanogan, near present Chief Joseph Dam, Fort Colvile, near Kettle Falls and Spokane House, near Spokane. Because the Big Bend region, including the project area, was not a prime fur area, Fort Okanogan functioned primarily as a routing post on the transportation network necessary to getting the furs to eastern markets. The closest permanent missions to the project area were St. Paul's and St. Mary's Missions, located near Omak. The only historic records which pertain to the project area itself are the records of travelers on the Columbia River or personnel from Fort Okanogan on short excursions. The archaeological record agrees with the documentary record: we found no evidence of Euroamerican occupation during the fur-trade era. The presence of Euroamericans in the Big Bend region is not, however, unrecorded archaeologically. Trade goods dating to this time period are found in the latest components at several Indian sites, 45-OK-2 (Campbell 1984), 45-DO-244 (Lohse 1984), and 45-OK-258 (Jaehnig 1984).

The next stage of historical development in the region began when gold was discovered in 1855 near Kettle Falls, bringing Chinese and American miners north from the California gold fields. The major mining districts, the Kootenay, Fraser, Clearwater, and Okanogan, were north of the project area, but the Columbia River in eastern Washington also attracted miners because of the placer mining possibilities along its banks. Placers are glacial or alluvial deposits of sand and/or gravel which contain gold in particles large enough to be captured by washing. The placer mines opened in the project area were temporary diggings requiring far less capital than hard rock mining. To mine a placer, prospectors mainly needed a good flow of water through a sluice outfitted with grooved linings called riffles which caught gold contained in the sand or gravel being washed through. Eight placer mines were recorded within the project boundaries, seven in Douglas County and one in Okanogan County. The Okanogan County mine was still being worked during the early 1950s. Several of the project area placers were reputed to have been worked by Chinese miners between 1860 and 1900. Informants also reported that abandoned placer mines had been reopened in the twentieth century during periods of economic depression.

The impact of gold mining on eastern Washington was dramatic. With the influx of miners to the area and surrounding mining districts, new transportation routes were developed, and settlement was encouraged. Open conflict with the Indians developed as the miners encroached upon their lands.

During the mining boom, supplies were transported north from Portland, The Dalles and Walla Walla to the mining districts to the north. Commercial ferries were established along the Columbia River at major crossings to transport supply trains and miners, who generally had pack animals but no boats. Three of the Columbia River ferries--Hopkins, Pendell and Condon--are included in the present survey of historical sites. Supplies and miners from commercial centers in the south crossed at these points to reach mines in western Okanogan County, such as those at Ruby and Conconully.

Indian hostilities increased as miners trespassed on the Indian lands. The U.S. Army was first called in to protect the white citizens, and later to protect the Indians' rights. The latter action was decidedly ineffective. An order issued by General Wool stated:

> "No emigrants or other whites, except the Hudson's Bay Company, or persons having ceded rights from the Indians, will be permitted to settle or remain in the Indian country, or on land not ceded by treaty, confirmed by the Senate and approved by the President of the United States....These orders are not, however, to apply to the miners engaged in collecting gold at the Colville mines. The miners will, however, be notified that should they interfere with the Indians, or their squaws, they will be punished or sent out of the country." (34th Cong. 3rd Session, Vol.1, pt.2, p.169, as quoted in Trimble 1914:22).

By excluding the miners who were much of the problem, this type of order had little real effect.

In 1872, the Colville Indian Reservation was established by Executive Order of President Grant. Twelve groups, three of whom claimed territory in the project area, were assigned to the land bordered on the north by Canada, on the east by the Idaho Territory, on the south by the Columbia River, and on the west by the Okanogan River. Only three months later, the eastern boundary was relocated to the Columbia River, far west of the original boundary.

Later, gold strikes west of the Okanogan River and subsequent pressure from miners resulted in the closure of the adjoining Columbia Reservation, located between the Cascade Mountains and the Okanogan River. Five groups, including Chief Moses' Band of Columbias, were moved from the closed reservation to the Colville Reservation. In 1885, Chief Joseph and his Nez Perce people were also moved onto the Colville Reservation, ending their exile in Oklahoma.

Even after establishment of the reservations, competition for land continued. As early as 1882, Symons wrote that commerce "of great extent would grow up as soon as these Indian Reservations are thrown open to the public and settlers discover their attractions (1882:38). He envisioned that "when the Colville Indian Reservation is thrown open to settlement, and becomes populated with thrifty and industrious whites, a railroad will be needed (Symons 1882:41). Because the reservation was not created by treaty, many American settlers still considered the land to be in the Public Domain and felt they had a right to settle it. When homesteaders exerted pressure, the size of the Colville Reservation was reduced a second time. In 1891, the north half of the reservation was opened for mining and settlement; the south half remained in tribal ownership but non-alloted land was opened to non-Indian settlement in 1916.

The allotment system had been instigated on the Colville Reservation pursuant to the Dawes Act of 1887. Enrolled tribal members were granted parcels of land similar to homesteads, but which were held in trust for the Indian holder by the government rather than patented. The goal of the allotment system was to assimilate Indians into American culture by encouraging them to farm and reside on specific parcels of land. This plan, officials believed, would break down village and tribal bonds. The allotment system also was a means by which land was returned to the Public Domain, as described above.

Four archaeological sites in the project area were allotments and their histories run parallel to the failure of the allotment system. Generally, this failure can be attributed to the small size of the parcels and the difficulties in transferring property ownership. Also, allotments were often leased to Euroamericans and this effectively negated the purpose of the allotment system. Three of the four allotments identified by our survey were leased to non-Indians for sheep grazing. Once white Americans gained control of allotments, ferries were commissioned to transport stock to summer pastures on the reservation. The presence of livestock not owned by Indians on reservation lands decreased Indian control still further.

If we shift the point of view and regard the region as part of American westward expansion, settlement by the project area came relatively late. Western Oregon, settled in the 1850s, was the primary source of the first immigrants to eastern Washington. The subsequent influx of people into the Pacific Northwest during the gold mining period created an enormous demand for Willamette Valley cattle which were soon brought to graze on the open range of the Columbia Basin. This demand lessened when the mining boom ended, but revived once the railroads reached eastern Washington, making Midwestern livestock markets accessible to Washington farmers. The cattle industry did not prosper widely, however, and, in 1885, open range lands still in the Public Domain were claimed by homesteaders.

The new settlers found that land which supported a luxurious growth of bunchgrass was more profitable for wheat production than cattle grazing. Many of the homesteaders came to the Big Bend region on the railroads that connected the area with regional grain markets in Spokane and national markets in Portland and Seattle (Meinig 1968:274-275,325). Yet expansion of the wheat industry into the Inland Empire was slow and experimental. It was late in the 1880s before wheat was first grown successfully in the Big Bend region.

Records of the General Land Office, responsible for surveying the Public Domain, showed few settlers in the project area between 1883 and 1908. A Douglas County Directory map series showed that in 1915 most available land along the river was occupied. Patent dates on the thirteen homestead sites recorded in the project area indicate that the Douglas County side was settled most actively between 1905 and 1910, and the Okanogan side in the 1920's and 1930's.

Homesteading in the project area, however, was a fairly short-lived phenomenon. The relatively wet years between 1910 and 1920, which encouraged immigration into the area, were followed by the droughts of the 1920's which ruined many small farms. Oral histories of the early homesteaders are remarkabIy similar. Lured by the General Land Office's reports of arable land watered by springs and with good pasture and timber, they took out patents and began farming, but found it unprofitable. There was simply not enough water: drought and economic depression effectively ended the homesteading period before 1920. Later, the original homesteads were aggregated into larger holdings. Modern techniques of irrigation, using water from the Columbia River have made these more recent farming ventures viable.

4. ALLOTMENTS

The allotment system, which granted parcels of land to enrolled reservation Indians, was formalized in 1887 in the Dawes Act. One goal of the act was to assimilate Indians into the white American culture by discouraging their traditional economic strategies of subsistence. By definition, an allotment was analogous to a homestead--each enrolled individual was granted a parcel of land to be improved by farming or grazing. An individual applicant was limited to properties not in excess of 40 acres of irrigable land, 80 acres of nonirrigable land, and 160 acres of nonirrigable grazing land as surveyed and designated by the General Land Office. Reservation lands that had not been allotted by 1906 were proclaimed "surplus" and opened to settlement by other homesteaders.

Our survey documented four allotments within the project boundaries, all near the Nespelem River. Only one seems to have been occupied by an Indian family; the others were leased to non-Indian families for sheep grazing or farming. Such leases, of course, frustrated the goal of assimilating Indians into the American economic system and may have been one reason for the allotment system's failure. More importantly, however, the farms allotted to Indians failed for the same reasons the white homesteads in the area failed: there was too little land and too little water. In consequence, allotments were often leased at low rates by their owners to white ranchers who then formed large tracts for grazing. As the following summaries show, this general pattern was reflected in the project area.

45-OK-238H -- ARMSTRONG ALLOTMENT

This site is part of an allotment made to Almira J. Armstrong on March 17, 1917. Records indicate that she was a minor attending St. Mary's Mission School at the time (Records of the Bureau of Indian Affairs, Real Estate Office, Nespelem). There is no indication that she ever occupied the property, and in 1928 her allotment was leased. The lessee was Cull White, controller of a large sheep grazing operation along the Nespelem River. Correspondence between Almira Armstrong and superintendents of the Colville Indian Agency indicate that she continued to lease the property over the years and wanted to sell it. Her request was denied until 1957 when she sold to J. E. Thoren.

General Land Office Records state that the Almira J. Armstrong Allotment (S-403) included Lots 1 and 2 in Section 32 and Lots 3 and 4 in Section 33, both in Township 31 North, Range 30 East, totalling 129.60 acres (Bureau of Land Management Archives, Portland). The property bordered the Columbia River on a bluff approximately 50 ft above the beach in 1907. The General Land Office surveyor described the sections as mountainous to rolling, with generally poor soils and scattered undergrowth of sagebrush and greasewood (see Appendix A). This allotment was immediately downriver from the Wickman placer mine, but there were no reports or signs of placer mining activity on the allotment. Interviews with local people revealed little additional information about the site. According to George Thalheimer, it was known as the old Armstrong place and one person who leased it raised peanuts (personal communication 1977).

The site is located on the north bank of the Columbia River, 3,690 ft (i.e. 1/2 mile) upstream from RM 581 (Figure 1-1), on a high terrace at an elevation of 1,050 ft above m.s.l. (Figure 4-1). Panama Canyon is immediately to the east and the Columbia River to the south. Evidence of the site may be seen in furrows of a formerly cultivated field, now abandoned and reverting to natural vegetation. This area is believed to be the former location of a dwelling and perhaps an outbuilding, as domestic debris is scattered over the surface. More of the site was found along the edge of the field at the beginning of the descent into Panama Canyon. Two root cellars, measuring 11 x 19 x 5 ft and 12 x 12 x 5 ft, were designated Features 1 and 2. A refuse dump of indeterminate size was designated Feature 3. The three features are numbered on Figure 4-1.

Feature 1 was rectangular with a single doorway at one of the short ends; its shape was a common one for root cellars in the region. It was built of logs set into an excavation in the side of the hill. The walls were 5 to 6 ft thick and lumber was used to construct the entryway.

The second root cellar, Feature 2, differed from the first in that it was square and its walls averaged about 1.5 ft thick. The walls and a single ridgepole were built of logs, but the roof and entryway probably were built of lumber. Like the first root cellar, it was constructed around an excavation into the side of a hill. There was no evidence of cribs or shelving in the interior of either cellar; round common nails were the only associated artifacts.

A third feature identified as a refuse dump was scattered on the lower slopes of the canyon walls. The dimensions of Feature 3 were impossible to gauge because the refuse was pitched randomly over the bank. Artifacts defining it included tin cans, enamelware, scrap metal, earthenware plate fragments, bottles, a stove pipe, and a barrel strap.

45-OK-174H and 45-OK-215H -- PAKOTAS ALLOTMENT

These two site numbers are components of a single land allotment, Allotment H-417, which was given in trust patent to Ka-si-at (Susanne) Pakotas on April 7, 1917. The property was located in Township 30 North, Range 30 East. It included 40 acres in Section 14, 37.73 acres in Lot 5 of Section 15, and 29.20 acres in Lot 6 of Section 15 for a total of 106.95 acres. Fifty of these were classified as agricultural and 56.95 were classified as grazing acres (General Land Office Allotment Records, Bureau of Land Management, Portland). Ka-si-at Pakotas died April 13, 1926, at the age of 19 and her

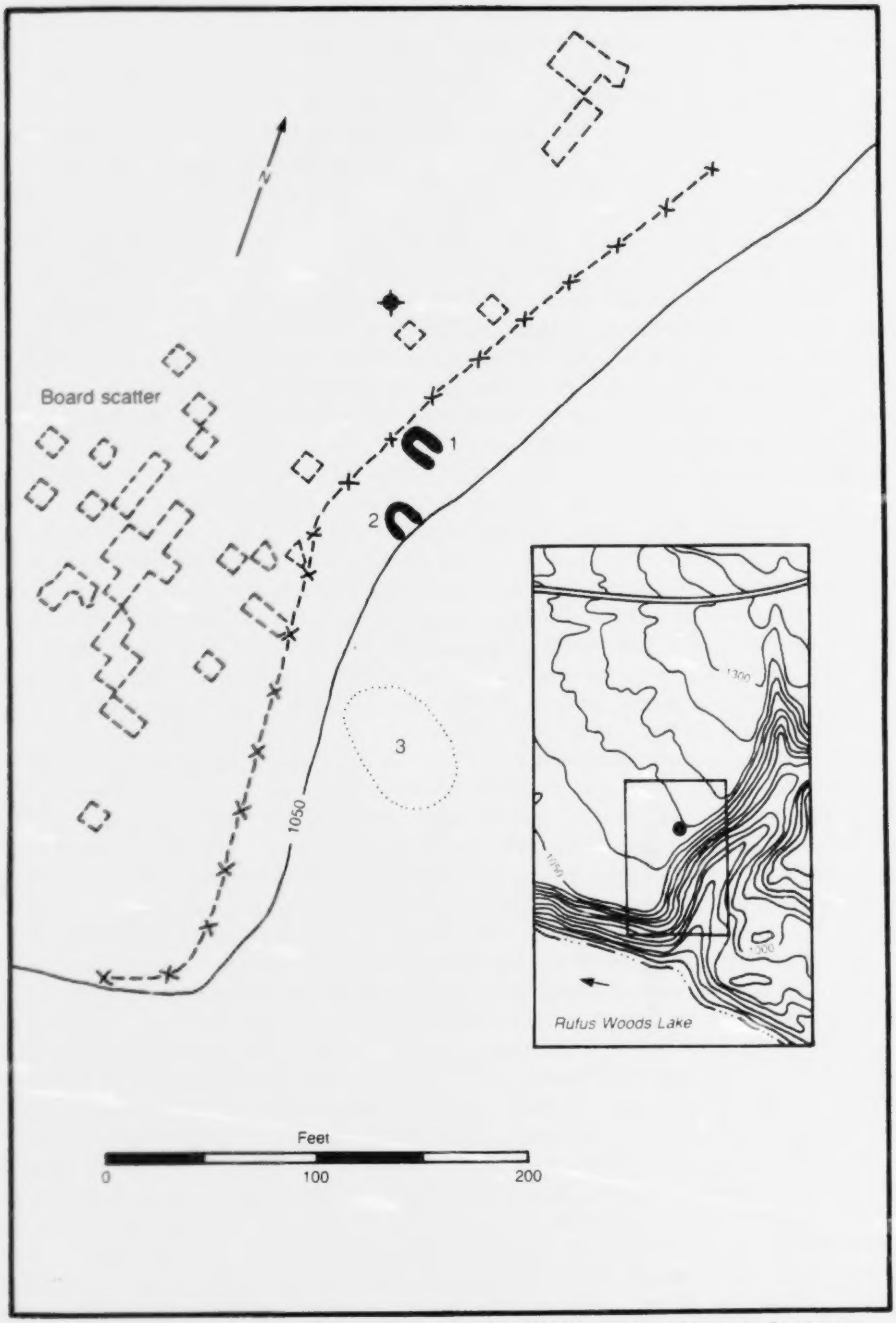

N
Board scatter
1
2
3
1050
1300
1050
1000
Rufus Woods Lake
Feet
0
100
200

Figure 4-1. Armstrong Allotment (45-OK-238H) and cultural features identified. For legend, see Appendix B.

mother, Alice Galler Pakotas, inherited the property in 1930. Mrs. Pakotas was also heir to an adjacent 154.89 acres of property (H-398), formerly held by her uncle, William Spo-hi. The historical records do not make clear whether Alice Galler and Ka-si-at Pakotas lived on Ka-si-at's allotment. According to records, Mrs. Pakotas lived in Nespelem, but whether she lived in town or in its vicinity is not known. There is some evidence that Mrs. Pakotas lived on the site during part of the time she owned it: the present property owner recalls that Alice Galler Pakotas was the last person to live there (James Short, personal communication 1977). Also, from 1927 to 1932, the property surrounding Lots 4 and 5 of Ka-si-at's allotment was leased to Mr. William Bell for sheep grazing. Since the allotment itself was not leased, it may have been occupied. Furthermore, the property is known locally as the "Old Pakotas Place." By 1958, the allotment was added to William Bell's grazing lease and was sold to him in 1960 (Bureau of Indian Affair Records, Colville Indian Agency, Nespelem, and Assessors Office Records, Okanogan County Courthouse, Okanogan).

General Land Office maps and field notes of a 1907 survey did not show any buildings or structures on Lots 5 and 6 of the site (see Appendix A). However, a "cabin--value About $50.00" was shown on Lot 7, which probably belonged to William Spo-hi, and a "wood" wagon road that ran north-south through the lots. The property was described as "mountainous--second rate sandy loam soil--sage brush, willow, brier, maple and birch" vegetation (General Land Office Field Notes, Bureau of Land Management, Portland).

During the 1977 field season, project workers contacted James Short, a local resident and present owner of the land. His reminiscences and observations are incorporated into the following description.

Separated into two sections by a ravine and perennial stream, 45-OK-174H and 45-OK-215H is on a narrow terrace between 980 and 1,020 ft above m.s.l. at RM 583 (Figures 1-1 and 4-2). Sagebrush, rabbitbrush, cheatgrass, pine trees, and deciduous trees presently grow on the site. Table 4-1 lists 18 features defined in the 1977 field survey. The features were in fair physical condition. Except for the main dwelling and the root cellar, their original character could notbe determined. The house was destroyed as part of reservoir clearing operations in the 1950s, and the cellar was filled in by the present property owner (James Short, personal communication 1977). Figure 4-2 shows locations of the cultural features identified.

The dwelling foundation (Feature 1) was built of fieldstones set with concrete. The walls were between 1 and 1.5 ft wide and formed a continuous perimeter around the house. A rectangular group of cemented stones located at the center may have been a chimney base. According to James Short, the dwelling was a frame building with board siding, typical of those on the reservation between 1916 and 1930. Mr. Short observed that U.S. Army Corps of Engineers records say the house enclosed "1,027 square ft," which contradicts the archaeological evidence unless the building was two stories high. The house was torn down about 1959 during a Corps reservoir clearing operation. A board pile (Feature 3) adjacent to the house foundation, consisted of lumber and refuse, presumed to be remnants of building materials. The house apparently was constructed of clapboard and some split logs. Common round

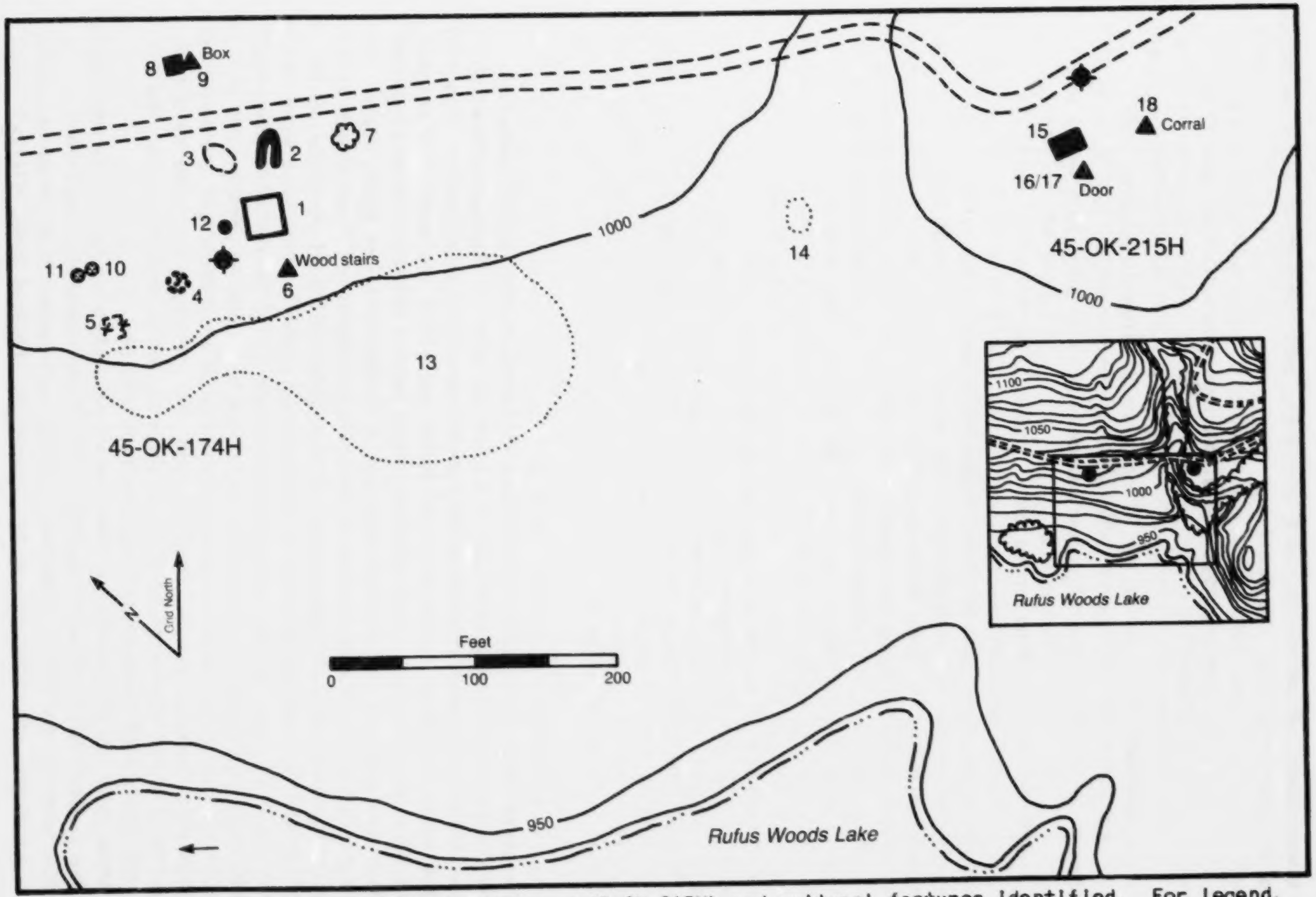

8
Box
9
3
2
7
12
1
11
10
4
Wood stairs
6
5
13
45-OK-174H
1000
14
15
18
Corral
16/17
Door
45-OK-215H
1000
1100
1050
1000
950
Rufus Woods Lake
Grid North
N
Feet
0
100
200
950
Rufus Woods Lake

Figure 4-2. Pakotas Allotment (45-OK-117H and 45-OK-215H) and cultural features identified. For legend, see Appendix B.

nails were used. A set of stairs (Feature 6), built of lumber and wire nails, was also associated with the dwelling.

Table 4-1. Feature type and dimensions at 45-OK-174H and 215H Allotment.

Feature	Type	Dimensions (ft)
1	Dwelling foundation	24 x 26
2	Root cellar	8 x 18
3	Board pile	21 x 15
4	Stone cairn	4 x 4
5	Unidentified fence enclosure	12 x 15
6	Wood stairs	
7	Apricot tree	
8	Chicken coop	6 x 6.5
9	Box	2.5 x 3
10	Privy pit (?)	3.5 x 5
11	Privy pit (?)	3.5 x 5
12	Two clothesline posts	
13	Refuse dump	110 x 130
14	Refuse dump	20 x 25
15	Barn	29 x 40
16	Door	2.7 x 8.1
17	Door	3.4 x 6.2
18	Corral	

A nearby root cellar (Feature 2) was filled in by Mr. Short (personal communication, 1977) because it was a hazard to cattle. The cellar was built into a rectangular excavation with log post frame and lumber walls. The roof was gabled and covered with soil. Mr. Short described its condition as good at the time he filled it. The building had a double doorway and was similar in shape and construction to the root cellar (Feature 1) at 45-OK-220H.

A fenced enclosure of unidentified function (Feature 5) was found in a gully on the west side of the house. It was constructed of four horizontal poles fastened by square notches at each corner. Vertical pickets were nailed to the inside of each of the pole sills and were reinforced near the top by another four horizontal boards. The structure was located parallel to an east-west barbed wire fence line, and two fence posts reinforced its southwest and southeast corners. It is possible that the structure was used as a crib or feed box, since the vertical pickets were nailed on the inside of the sill and were capable of supporting pressure from inside.

An unidentified stone cairn (Feature 4) was noted along the terrace bank near the house. Constructed of medium sized river cobbles placed in an irregular circle, the cairn contained and was surrounded by a large amount of refuse. A Mason jar and bottle glass fragments, tobacco cans, tin can lids, boards, and a brick were identified; the cairn may have been another refuse dump.

Two clothesline posts (Feature 12) were located near the house (Feature 1). Both were built of vertical logs with lumber crosspieces and round common nails to attach clotheslines. The posts had a north-south orientation and were set 56 feet apart.

Eight fence posts were also noted in the survey of 45-OK-174H but were not given a feature number. They were found in an east-west pattern in front of the house along the terrace bank and were the only remnants of a barbed wire fence at the site.

A single apricot tree (Feature 7) was found at the site, northeast of the dwelling (Feature 1) and east of the root cellar (Feature 2).

Two surface depressions (Features 10 and 11) southwest of the house (Feature 1) and north of the fence enclosure (Feature 5) were tentatively identified as filled privy pits. Although there were no building remains associated with these pits, they were recognized as artificial depressions. A galvanized can, possibly a milk can, was found partially buried in Feature 10.

A single chicken coop (Feature 8) was located across the road from the creek and was designated 45-OK-215H by Munsell and Salo (1977). James Short thought this building might have been used as a dwelling at one time, but no archaeological evidence supported this. A box (Feature 9) was found near the chicken coop. It was built of scrap lumber and probably was a feed box.

The road bordering the homestead was unpaved and used only by the present land owner. It appears to be the roadbed described in the 1907 General Land Office survey as a "wood road." The surveyor may have meant a corduroy road. Mr. Short (personal communication 1977) described this road as an "Indian agency road or a government road" used by the settlers along this section of the river.

The barn and associated features were located upstream from the creek in site 45-OK-215H. First numbered independently, these features, have been renumbered in sequence with those of 45-OK-174H. The barn (Feature 15) was actually two buildings, one of log and the other of frame construction, placed one against the other. The log building appeared to have been constructed first, since the rafters of the frame building were superimposed over the log building's plate and portions of a log wall were still in place between the two buildings. The log portion of the barn was 14 x 20 ft. Surveyors could find no signs of flooring, so the barn was assumed to have had a dirt floor. From ground surface, the log walls rose to a height of about 6 ft and then were extended another 5.6 ft by the gable ends. These logs were peeled and left round except for those used on the window sills and doorway opening. The latter were square hewn. The corner logs were fastened by square notching. A single window opening was on the west wall; its top and bottom logs were notched to hold a frame; the other framing logs were cut short to form the aperture. Although the one doorway had collapsed, it appeared that the wall logs had been cut to accomodate a door frame. The building's roof was gabled and oriented to the long axis of the barn. It was constructed of 2 x 4-in rafters nailed to the log wall plates and fastened at the roof apex by miter cut and nails. Board sheathing was nailed to the rafters. The gable ends were framed by 2 x 4s and covered with vertical boards. A single window and board shutter were located in the west gable end.

The extension to the barn appeared to be a shed of frame construction, but its exact function could not be discovered from the remains, since it had collapsed and the roof fallen over the interior section. The dimensions of this portion of the barn were approximately 15 x 20 ft. The foundation consisted of two 2 x 6-in boards nailed together and set on edge. This sill was found on three sides but not between the two buildings. The walls were elevated by two 2 x 4s, one at each front corner, that were nailed to overhead rafters which framed the roof. The roof was covered with wood shingles and the walls with vertical 1 x 6-in and 1 x 8-in boards. A doorway was located in the shed's west wall, and two doors (Features 16 and 17) were found nearby. The two doors suggested that there had been two entrances to the shed, although the location of only one could be confirmed. Both doors were built of vertical boards fastened with braces. Round common nails and strap hinges were used to construct the barn and its associated features.

A collapsed post and rail corral (Feature 18) was found on the east side of the barn at 45-OK-215H. The rails were about 10 ft long and were stacked horizontally between two vertical posts, about 5 ft high, and fastened with barbed wire. Although mostly destroyed, the corral appears to have been attached to the barn at one time.

As noted above, two concentrations of objects were recorded as refuse dumps. The larger (Feature 13) was located in front of the dwelling at 45-OK-174H and extended over the lip of the terrace toward the beach. The surface debris appeared to be randomly scattered. The vast majority of objects were domestic or personal items, although some transportation and industrial/agricultural objects were recorded. No items were collected for laboratory analysis, nor were frequencies of objects recorded. Instead, a descriptive list of the contents was prepared and is recorded below.

> Domestic objects: enamelware, stove pipe, bed spring, baby buggy, canning jars and lids, food jars, food can, clock spring, aluminum canteen.
>
> Personal objects: medicine bottles, leather and rubber shoe soles, cosmetic jars, tobacco cans (Prince Albert), comb, flashlight.
>
> Transportation objects: automobile parts, wagon/buggy parts, oil cans, rubber tire, Washington State license plate "U1837 1935."
>
> Industrial/Agricultural objects: hoe blade, leather harness parts, pintle hinge, cast-iron machine parts.

The second refuse dump (Feature 14) was scattered along the hill that descended to the creek which flows through both allotments. This refuse, consisting solely of tin cans, had apparently been disposed of in random fashion. No attempt had been made to bury it. The thick vegetation along the creek prevented close inspection, so there may have been other objects as well.

The Pakotas site was littered with surface debris, particularly around the house. Because the debris had no identifiable boundaries, no attempt was made to map the location or record artifact frequencies. The artifacts in this scatter were mostly the same types found in the refuse dumps. A few objects not recorded earlier were of special interest. They include disc phonograph record fragments, a 1938 token, shell buttons, safety pins, blue transfer printed china with "Japan" printed on it, a red bead with mold marks, and a stove damper marked "Griswold, Erie, P.A. U.S.A. American 6."

45-OK-220H -- GALLER ALLOTMENT

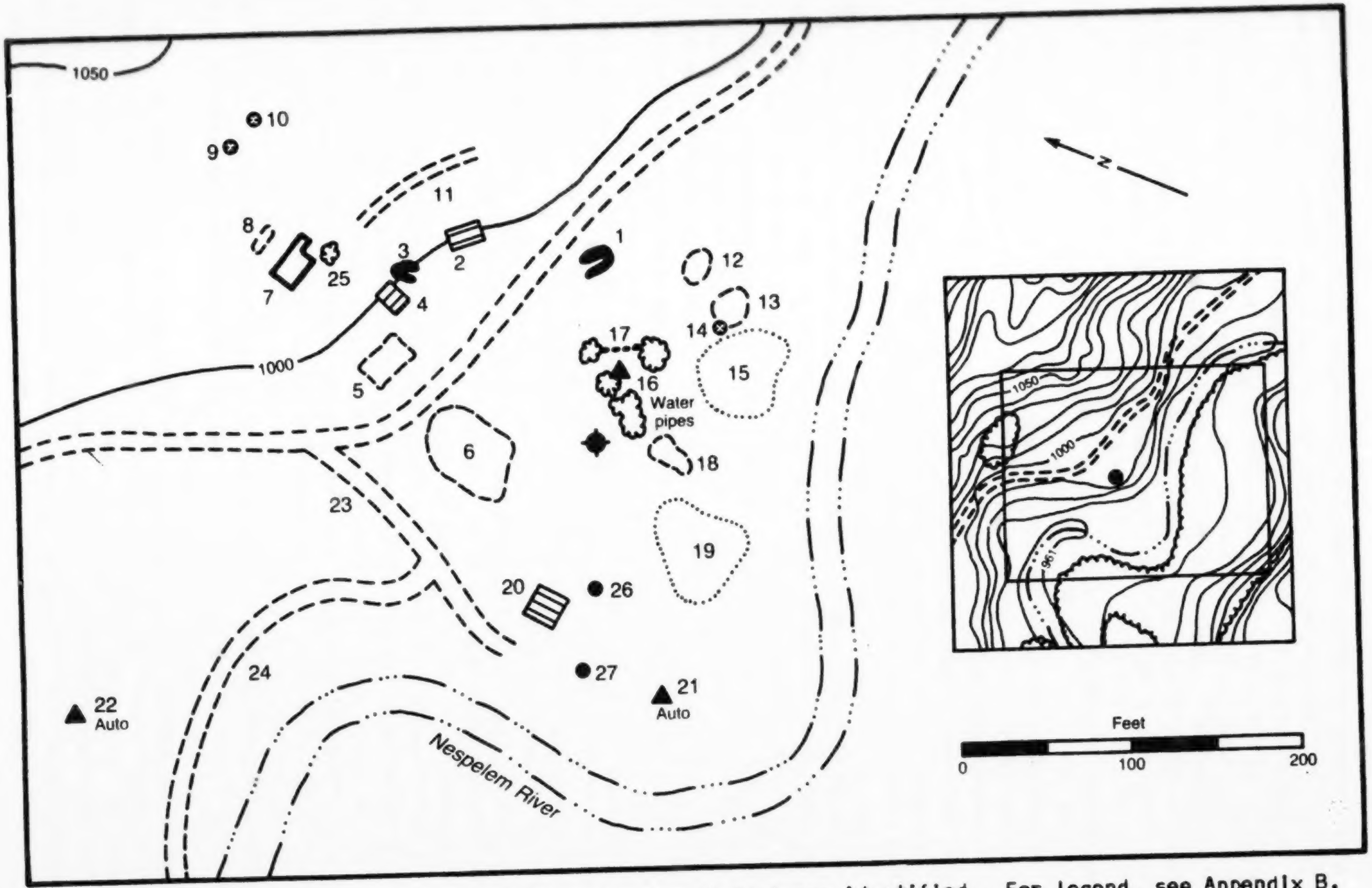
Site 45-OK-220H is on property alloted to Edna G. Galler (Allotment S-2341) on April 6, 1930. Earlier, in 1903, this property had been patented as part of the Multnomah Mining and Milling Company's Wickman and Peabody placer claim. That patent was cancelled in 1917. Edna Galler's father, William, had first selected the property as an allotment in 1915. It totaled 120 acres, 40 acres of which was designated as agricultural and 80 acres as grazing land. It was located in Section 3, Township 30 North, Range 30 East (see Appendix A). No evidence indicates that Edna Galler ever lived on her allotment although there were several buildings there; records show that the land was leased to sheep ranchers (Bureau of Indian Affairs Allotment Records, Colville Indian Agency, Nespelem). Edna's husband and brother inherited the property when she died in 1948. According to a local informant, the site was abandoned about this time and the buildings have deteriorated since. After some years, the property was declared nontrust land. No longer under Bureau of Indian Affairs control, it was sold in 1960.

Land survey notes of 1907 describe the section in which the allotment is located as "rolling to mountainous" with "2nd rate sandy loam" soil, and undergrowth of "sage brush, greasewood, willow, and small timber with driftwood" (General Land Office Field Notes, Bureau of Land Management Archives, Portland). Two roads entered the section from the south, but neither crossed the Nespelem River.

The site is on the north bank of the Columbia River, 1,000 m upstream from RM 582 (Figure 1-1) and on the north bank of the Nespelem River, 4,100 ft (i.e. 3/4 mile) upstream from its confluence with the Columbia River (Figure 4-3). It is spread over two terraces and a hillside between 960 and 1,010 ft above m.s.l. in the area designated as grazing land. Most of the site is on the upper terrace in the vicinity of a dirt road. The land is remarkably open, mainly covered with grass. At the time of our investigation, some Ponderosa pines and domestic trees grew there but virtually no sagebrush. The 27 features found in the 1977 field survey of the site are listed in Table 4-2. Their locations are shown in Figure 4-3.

Several buildings in varying states of preservation were found at this site. Mr. Short (personal communication 1977) suggested that the Gallers put them up, but this could not be verified.

One root cellar (Feature 1) was so exceptionally well preserved that it became the standard for recognizing root cellar characteristics throughout the project area (Figure 4-4). It was built by excavating an oblong pit in the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17
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5
6
18
19
23
20
26
24
27
21
Auto
22
Auto
Nespelem River
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1050
1000
961
Feet
0
100
200

Figure 4-3. Galler Allotment (45-OK-220H) and cultural features identified. For legend, see Appendix B.

Table 4-2. Feature type and dimensions at 45-OK-220H, Galler Allotment.

Feature	Type	Dimensions (ft)
1	Root cellar	17 x 19
2	Chicken coop	8 x 24
3	Root cellar	5 x 8
4	Shed	12 x 18
5	Collapsed roof	18 x 30
6	Collapsed barn	40 x 65
7	Dwelling foundation "bunkhouse"	20 x 24
8	Board scatter	4 x 10
9	Privy pit (?)	4 x 4
10	Privy pit	4 x 4
11	Road	5 x 80
12	Board scatter	7 x 12
13	Board scatter	12 x 20
14	Privy pit (?)	6 x 6
15	Refuse dump	50 x 55
16	Water pipes	
17	Dwelling foundation	1 x 21
18	Board and refuse scatter	15 x 30
19	Refuse dump	55 x 65
20	Barn	20 x 20
21	Automobile	
22	Automobile	
23	Road	
24	Road	
25	Lilac bush	
26	Fencepost	
27	Fencepost	

side of a small hill, then constructing a wooden building inside and finally backfilling the pit. This cellar and all others had dirt floors. Stones were used to stabilize the hill near the entryway and the backdirt covering acted as insulation. Feature 1 had a narrow porch, 4.5 ft long, that extended beyond the main body of the cellar. This was used to keep snow or debris from blocking the single doorway. The cellar was constructed of horizontal double board walls over stud framing; a tarpapered roof covered it. A board facade extended the wall behind the porch. The main body of the root cellar was rectangular and framed with studs ranging from 2 x 4 to 4 x 4 in. It was covered with horizontal exterior board siding. This roof was also gabled, fastened to a ridgepole and covered with boards. A wood vent through the roof ventilated the cellar. Three wide storage shelves lined one interior wall.

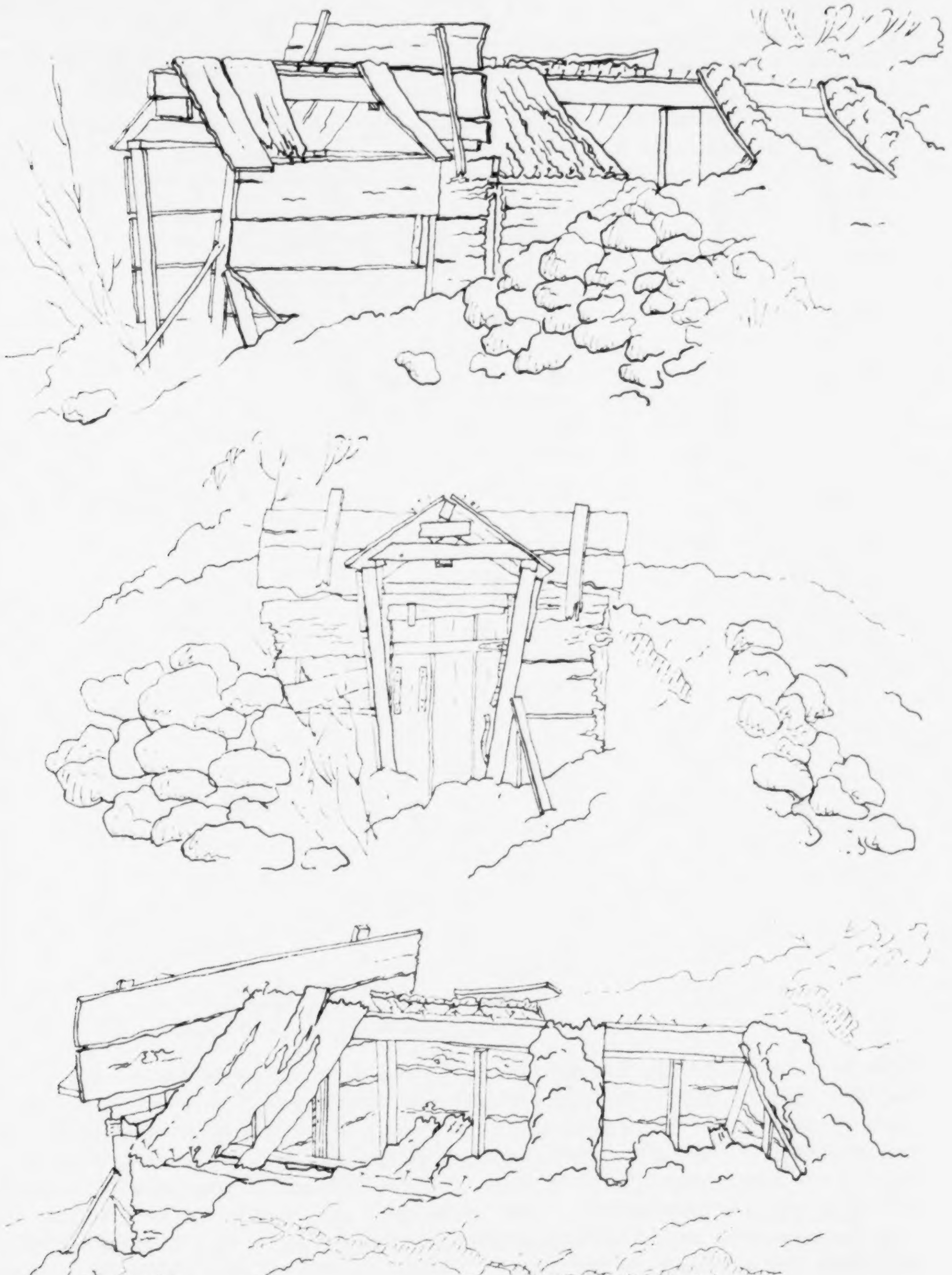

Figure 4-4. Root cellar (Feature 1) at Galler Allotment (45-OK-220H). (Drawn by Rebecca Hill-Chance.)

The doorway was constructed of three vertical boards fastened with two horizontal braces made from 2 x 4s. Round common nails were used to build the cellar. Some canvas weather stripping for the door, two spring close strap hinges, a hasp, and two wooden door pulls were found.

A chicken coop (Feature 2) appeared to be two separate buildings that shared a wall. The eastern building was 8 x 10 ft and the western building, 8 x 14 ft. Constructed with very little framing timber, both buildings were in poor condition although still standing. The frame was simply a box with 2 x 4s used as sills, corner studs, plates, window and door casings, and rafters. A single exterior layer of 1 x 12 in boards was nailed to the frame to form the walls and shed style roof. The wall boards were vertical except under a window on the front wall of the west buildings. Each wall except the back one had one doorway; the two windows were both in the front wall. Only one door remained in place. It was built of vertical boards with a Z brace. The windows were covered with chicken wire. A small passageway in the shared wall allowed chickens to move from one building to the other. The west building contained nesting boxes. Artifacts found in the building included round common nails, tarpaper, chicken wire, and asbestos weather stripping, iron strap and canvas door hinges.

A hillside cave-in had destroyed a second root cellar (Feature 3) nearly beyond recognition, although the original excavation and trusses for the entry porch were still visible. The trusses were constructed of 2 x 4s and the porch was roofed with boards paralleling long axis of the building.

The function of Feature 4, designated as a shed, could not be determined with certainty. Mr. Short (personal communication 1977) suggested that it was a root cellar. Its heavy construction and size, however, indicated that it may have been a feed shed or crib. The building site was prepared by excavating into the hillside, building walls, and then backfilling the area around the walls, just as was done in the construction of root cellars. The frame was constructed of 4 x 4-in studs and covered by horizontal boards on both the interior and exterior. The roof was a low pitch gable with a single ridge beam and 2 x 4-in rafters. Since roofing boards were of a much lighter lumber than the siding boards, it is doubtful that the roof was covered by backdirt. A single doorway in the front wall gave entry to an open room with a dirt floor. The only interior furnishing was a bin built against the wall in the southwest corner. Round common nails, strap hinges for the door, and a door latch chain were found in or near the building.

According to Mr. Short, Feature 5 was the remnant of a storage shed. All that remained were the roof, scattered pieces of lumber, and some wagon parts. Presumably, the rest of the building had been salvaged. The gable roof was a combination of log and lumber boards and seemed to have been reroofed at least twice. Logs were used for the ridgepole and rafters. Boards were nailed over these and then wooden shingles applied. A second roof of boards was added later.

Feature 6 was a collapsed "double barn" (James Short, personal communication 1977). Like the storage shed, it was constructed of a combination of logs and boards. Portions of the foundation had vertical log footings that elevated the sills and floor; in other sections, the sill and girders simply rested on the ground; the difference was attributed to ground slope. The walls were framed with whole logs and sided with boards. The roof was gabled and shingled. Because of its delapidated condition, room divisions within the building could not be identified.

A wood foundation (Feature 7) was found on a very narrow terrace along the hill at the site's perimeter. This building was described as the "bunkhouse" used when the allotment was leased to sheep ranchers (James Short, personal communication 1977). The foundation was constructed of 6 x 6-in and 2 x 6-in sills fastened at the corner by lap joints and nailed. One medial girder was used in the foundation. The sills were elevated and leveled by fieldstones and wood shims. The floor joists were 2 x 4s set on 2-ft centers and covered with ship-lap floor boards. A 6.5 x 7-ft porch floor extended to the northeast corner. Remnants of the bunkhouse superstructure (Feature 8) included board scraps, a door frame, a window frame, and a screen. The lumber from the building was presumed to have been salvaged.

Feature numbers 12, 13, 16, and 17 were assigned to remnants of a second dwelling. According to Mr. Short, this was the original dwelling at the site and was last occupied in 1947-48. A partially buried alignment of fieldstones (Feature 17) was all that remained of a foundation wall and corner. Two galvanized pipes (Feature 16) were located within the presumed boundaries of the foundation. Both pipes were 3/4 in in diameter and were found within a shallow excavation. One pipe was used to feed water into the house by gravity pressure from a spring on the hill above the site. The other pipe was bent and attached to an iron shut-off valve. Two separate board scatters (Features 12 and 13) appeared to be the only remnants of the dwelling's superstructure. Two wood braces of a type commonly used to reinforce roof eaves were found among the rubble of Feature 12. In Feature 13, several 1 x 12-in planks, about 10 ft long, were similar to the siding found on the standing buildings at the site.

Another barn (Feature 20) was found on the lower terrace along the Nespelem River. The walls and roof of this building were gone and probably had been salvaged, although a few boards were still intact or were scattered in the vicinity. The foundation consisted of vertical block footings placed at each corner and in the center of the sills. The sills were 6 x 6-in timbers fastened at the corners by lap-joints. A 4 x 4 in stud was toenailed to the sills at each corner and at the center of each wall. Because this was an unstable wall frame, knee braces were used for reinforcement. The braces were nailed to the studs and sills and then reinforced again by 2 x 4-in cleats nailed to the studs. The corner studs rose continuously to the roof plates, while the center studs ended at a lower horizontal timber, 5.5 ft above the sill. This stud circumscribed the building and was used for nailing the siding boards. The remaining siding boards were 1 x 10s that extended from ground surface to the roof on the building's exterior. The top cut on the siding boards and the height of the corner studs suggested that the building had a shed roof. The interior of the barn seemed to have been an open room with one wood bin along the west wall.

In addition to the dirt road used by the present residents of the area, two roads were associated with the allotment property. One road leading up the hill to the bunkhouse was designated Feature 11. Its vague and extremely eroded boundaries were best identified from a distance. The second road (Feature 23) turned off the modern road toward the lower terrace near the Nespelem River. There it forked again, one fork going downriver (Feature 24) and the other upriver. Mr. Short (personal communication 1977) remembered a foot and car bridge had once crossed the river there.

Three refuse dumps (Features 15, 18, and 19) were found along the hill in front of the main dwelling (Feature 17). These all appear to have been randomly deposited. All objects were found on the surface and no buried deposits were evident. Most of these were associated with domestic use, but some personal, transportation, agricultural/industrial, and miscellaneous artifacts were recorded. The predominance of domestic items suggested that the refuse dumps were associated with the dwelling and were deposited while the house was occupied or after it was being torn down. The contents of the three dumps are listed below.

Domestic objects: tin cans, glass bottles and jars, enamelware utensils, cast-iron griddle, wash tub, stove pipe, dry cell batteries, ice cube tray divider, "Gold Shield Coffee" can, "Heidelberg Beer" can, "Mazola Refined Corn Oil" can, "Log Cabin Syrup" can, beer (11 fl. oz.) bottles, "Cascade Beverage Co. Wenatchee, Wash." soda pop bottle, 4/5 liquor bottle.

Personal objects: leather shoe fragments, tricycle, rubber boots.

Transportation objects: inner tube.

Agricultural/Industrial objects: woven (hog) wire, barbed wire, "Union 76 Outboard Motor--Chainsaw-Power Lawn Mower-Etc." oil can.

Miscellaneous objects: wood lathe, cast iron fragments, sheet metal, unidentified glass vessel fragment.

Construction material objects: stove pipe, roof flashing, 2 x 4 in boards, 1 x 12 in boards, 1 x 4 in ship-lap boards.

Two abandoned cars were also found at the site. Both were located off the roads on the lower terrace near the Nespelem River. Feature 21 was a Plymouth coupe, stripped of most of its parts. Feature 22 was a car of an unknown make that had also been stripped.

Three possible privy pits were found. All of them were located near the two dwellings. Features 9 and 10 were found on the hill behind the "bunkhouse" (Feature 7). The pits were two round depressions without structural remains. Feature 14 was found along the bank near the second dwelling (Feature 17). It had been filled in, and only a circular depression remained. Several boards were scattered in the vicinity but none could be identified as part of a privy structure.

Three additional features were noted. These were: a lilac bush (Feature 25) growing at the southeast corner of the bunkhouse (Feature 7), a grove of honey locust trees, growing on the site of the dwelling foundation (not assigned a number but illustrated in Figure 4-3). and two fence posts (Features 26 and 27) found near the barn (Feature 20) on the lower terrace.

45-OK-224H — GALLER ALLOTMENT

This site, like 45-OK-220H, is part of the Edna Galler Allotment selected in 1915 and patented in 1930. Prior to 1915, it was within the boundaries of the Peabody placer claim. The property was classified as "grazing land" (General Land Office Records, Bureau of Land Management, Portland). As noted above, no records or informants indicate that Edna Galler ever lived on the property; it is assumed to have been occupied by a leaseholder.

The property was located in Section 3, Township 30 North, Range 30E (see Appendix A) in the vicinity of a "boat landing" shown on a 1918 geological map in the NE 1/4 of Section 3 (Pardee 1918). The site may have been associated with the boat landing.

Site 45-OK-224H is on the north bank of the Columbia River, 1,560 ft upstream from RM 582 (Figure 1-1) and on the north bank of the Nespelem River. Before Chief Joseph Dam was built the site was 2,300 ft upstream from the Nespelem's confluence with the Columbia River (Figure 4-5). Bounded at the rear by a hill rising to a higher terrace, the site was found on an alluvial plain about 950 to 980 ft above m.s.l. The vegetation was predominantly low grass cover with some sagebrush. The four features noted in the 1977 field survey are illustrated in Figure 4-5 and described below.

The root cellar (Feature 2), measuring 14 x 21 ft, was in very poor condition. It had collapsed and been covered by colluvium from the nearby hill. Its construction was similar to the cellars at 45-OK-220H. After an oblong hole had been dug and reinforced at the entryway with stone retaining walls, the wood parts of the cellar were built inside the hole. Lumber associated with the cellar indicated that it had studs at the corners and horizontal board walls. A possible ridgepole suggested that it had a gable roof. The cellar was probably backfilled for insulation. The other features consisted of two artifical terraces (Features 1 and 3) measuring 14 x 21 ft and 28 x 28 ft, and a refuse dump (Feature 4).

The artifical terraces were recognized by their deliberate cuts into the ground slope. Both were squarish, and the actual excavations were readily visible when the vegetation was low during the fall and winter months. The same terraces can be identified in the summer months by the presence of tumbling mustard (Sisymbrium altissumum). Presumably these terraces were cut to level the ground prior to the construction of buildings.

A road was found running east-west between the terraces and the Nespelem River but was not given a feature number. The dirt road, overgrown and unused, probably was the road that ran to the boat landing.

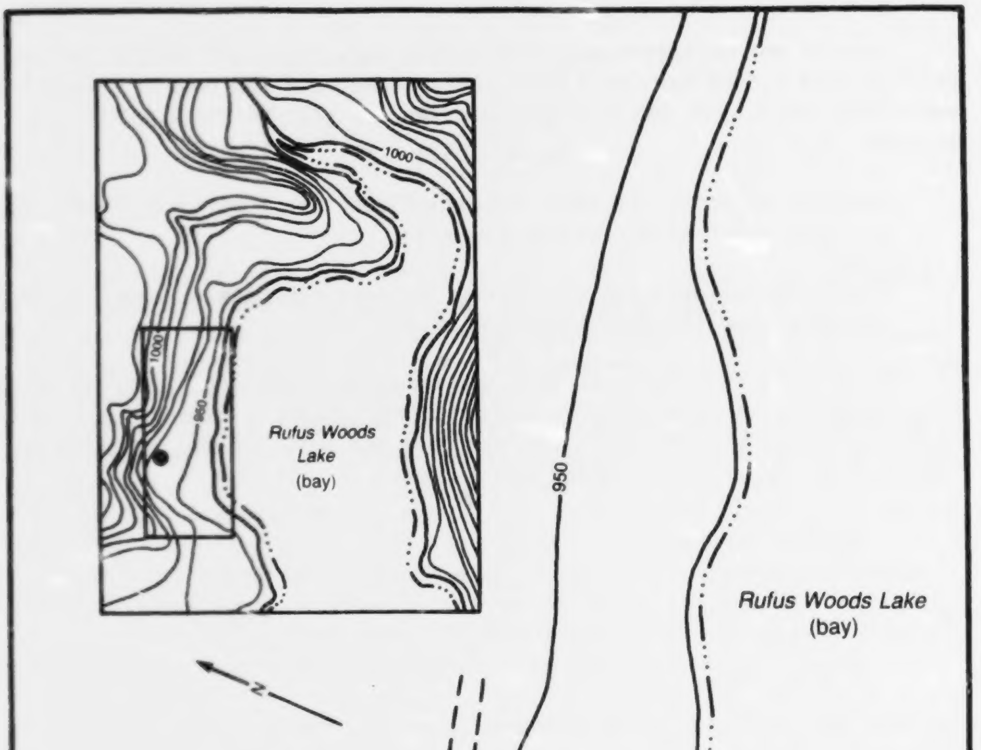
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Figure 4-5. Galler Allotment (45-OK-224H) and cultural features identified. For legend, see Appendix B.

Some of the objects found at the site were of recent origin but objects concentrated around Feature 4, the refuse dump, and the heavier items likely were associated with the site's occupation. A list of those artifacts follows.

Domestic objects: tin cans, "Olympia" beer can, cast-iron stove leg, bed springs, sheet metal, stove fragments.

Miscellaneous objects: strap iron, unidentified glass vessel fragments, hay bale rope (nylon), 50-gallon drum.

Aside from Feature 4, objects scattered over the site included kerosene lamp fragments, a Purex bottle, a plastic toy wheel, a Band-aid box, a 1933 Idaho license plate "7H 14-51," an eye bolt and nut, a metal water pail, foam rubber, and a wood window frame and screen.

5. PLACER MINES

The discovery of gold near Kettle Falls in 1855 brought fortune-seekers on to Indian lands where only occasional fur traders, explorers and missionaries had ventured before. Although the project area did not become a major mining district, placer mining of the beaches, bars or terraces of the Columbia River rewarded the efforts of a few.

The placers in the area were reputed to have been worked primarily by Chinese. These gold miners, contracted by Chinese companies in California, panned and sluiced gold from the Columbia River and its tributaries in the 1860s and 1870s. Between 300 and 400 Chinese miners were working the Columbia and Pend Oreille Rivers in and near Fort Colville in 1865 (Hildebrand 1977:11). Chinese camps seen along the banks of the rivers typically had dwellings of cedar boards roofed with logs and brush (Hildebrand 1977:12). Near the project area, Chinese placer miners were reportedly hired by Wild Goose Bill Condon to help build his road from Fort Spokane to Ruby in the 1880s (Weber 1977).

In general, white miners tended to demand high yield "diggings" and sold any relatively low yield claims to the Chinese. All over eastern Washington, the Chinese migrated to the marginally productive areas or to mines considered to be "played out" by white miners (Trimble 1914:144). Occasionally, mines abandoned by both Chinese and American miners were reopened during times of economic depression (George Thallheimer, personal communication 1977).

Placer mining was done by removing the sandy overburden in order to work the gold bearing gravel deposits below. This left excavation scars often littered with cobbles of various sizes. Simple equipment--rockers and/or sluices with riffles of several different materials--were used to extract the gold from the soil. A "grizzely" separated larger gravels and cobbles from sand in the sluice box. Placer mining required plenty of water; sometimes flumes and ditches several miles long had to be constructed to provide the mine with water. Symons (1882) notes one such engineering feat:

> ...they [Chinese miners] have taken the water from Hawk Creek and conducted it about three miles in ditches and wooden flumes made of whipsawed lumber, and have taken it to a large bar-island in the river, crossing the intervening channel by means of an inverted siphon, also made of whipsawed lumber (1882:28).

Eight placer mines were identified in the project area. One additional site was investigated, but the evidence did not confirm that placer mining had been done there. Seven of the mines were located in Douglas County: four of these were reputed to have been worked by Chinese miners. Only one mine was found on the Okanogan County side of the river on the Colville Reservation. This imbalance is not surprising since the reservation was closed to mining until 1898. Traces of other mines worked before the reservation was established in 1872 were not found. No records show the value of the minerals taken from the mines in the project area. The eight mine sites and the one site investigated for a mine are summarized below.

45-DO-200H

This placer mine site is relatively small and may have been a prospect rather than a developed mine. It is located in Section 10, Township 30 North, Range 28 East, on the south bank of the Columbia River, 495 ft downstream from RM 569 (Figure 1-1), at an elevation of 950 ft above m.s.l. The site consists of two parallel excavations dug perpendicular to the river. Each is from 7 to 10 ft wide, 10 to 15 ft long and 1 1/2 to 2 ft deep. Both are filled with basalt and granite river cobbles. Vegetation--mainly cheat grass and sagebrush--near the excavation trenches was undisturbed at the time we investigated. No plants were growing in the trenches.

General Land Office Field Notes (Bureau of Land Management Archives, Portland) indicate that the placer mine was located about 50 ft above the river in 1905. There was, however, no mention of the miner or other occupants of the property. The property's first known occupant was Edward F. Gerdeman who took a "cash entry" patent in 1914 (General Land Office Records, Bureau of Land Management Archives, Portland). The mine may have been worked by Gerdeman around the turn of the century, as suggested by one of the present owners of the property (Fred and Harold Weber, personal communication 1977).

45-DO-210H

Munsell and Salo (1977) did not record the placer mine portion of this site in their reconnaissance although they noted a root cellar and refuse in the vicinity. Available historic and archaeological data were not sufficient to determine whether the root cellar was associated with the placer mine or a later homestead.

The first known owner of the property was William R. Prather. On May 13, 1890, he took out a "cash entry" patent on 127.35 acres in Lots 1 and 2 of Section 1 and Lot 1 of Section 12, Township 30 North, Range 30 East (General Land Office Records, Bureau of Land Management Archives, Portland). Although a 1915 plat map does not record the land owner, a house in Lot 1 and another in Lot 2 (both in Section 1), as well as the Barry Ferry crossing and road entering Lot 1 are depicted. The house in Lot 1 on the downstream side of Sanderson Creek was the only feature found that may be one of those on the plat map.

The site is on a generally flat terrace about 960 to 980 ft above m.s.l. On a low sandy beach in front of the site, investigators found fragments of a wagon. Vegetation was primarily sagebrush and cheat grass. Some bitterbrush and several deciduous trees grew along the riverbank. The bank is steep and incised along the entire length of this site, a configuration caused by placer mining activities.

The placer mine itself is fairly large, extending about 1,000 ft along the terrace and about 300 ft back from the riverbank. Five excavations were noted and all were oriented roughly perpendicular to the river. The excavations were also large, and ranged from 20-25 ft in length, 24-200 ft in width, and 5-10 ft in depth. Excavations in the vicinity of the root cellar tended to be U-shaped with slightly perpendicular walls and flat bottoms. Basalt and granite river cobble piles formed the floors of these excavations about 10 ft below the surface. The excavations on the downstream side of the site tended to be V-shaped and resembled natural erosional features.

In addition to the placer excavations, two features were recorded in the historic survey. Feature 1 was a root cellar measuring 13 x 25 ft and Feature 2, a structure of unidentified function, measured 23 x 12 ft.

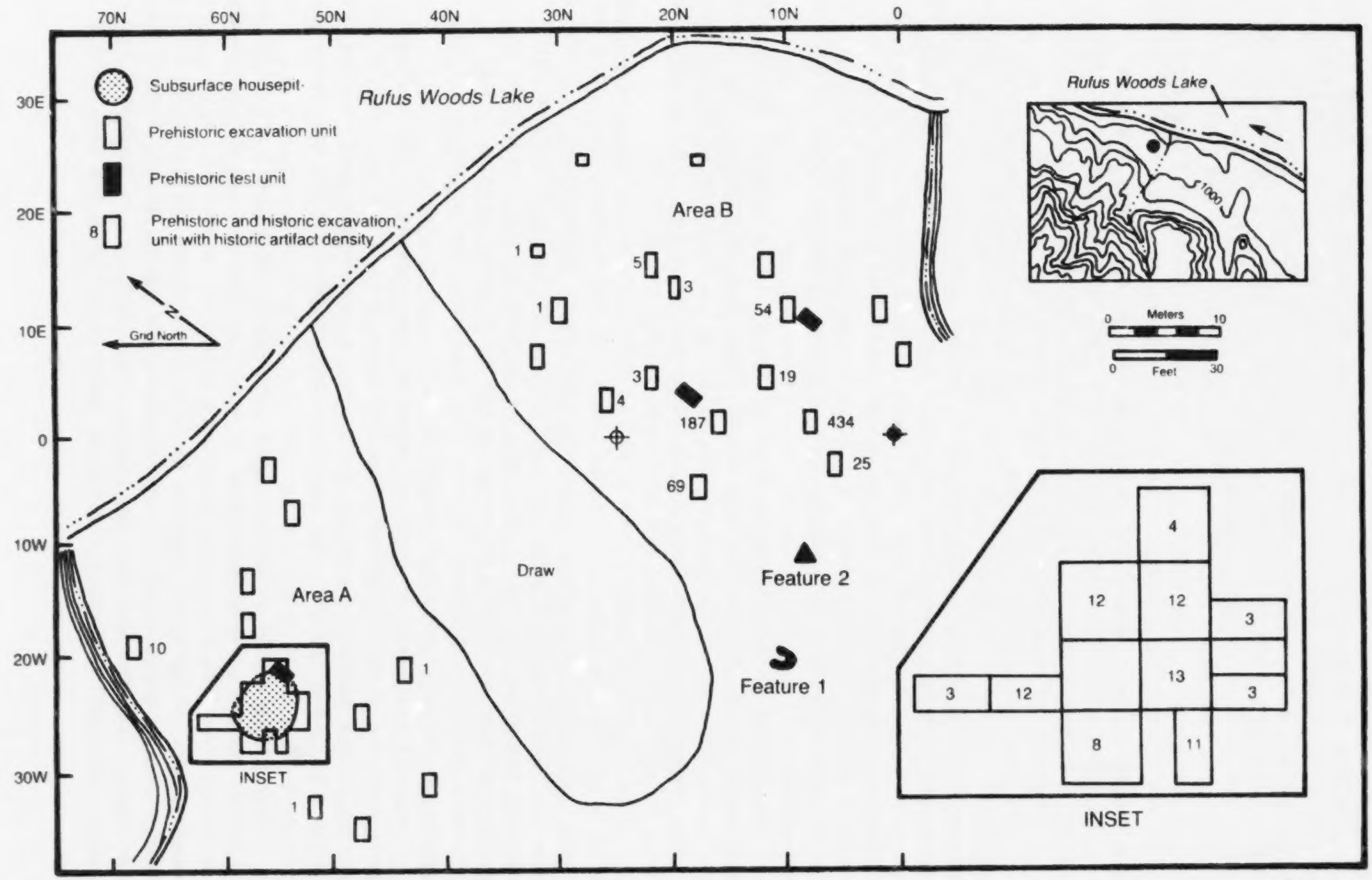
The root cellar (Feature 1) had a 6-ft wide, 10-ft long entryway on the east wall. Details of the cellar's construction were difficult to observe because most of the structure was still buried. Surveyors did note that the cellar had been dug underground and was flush with the ground surface. The walls were constructed of logs and planks. The 2 x 12-in planks were nailed horizontally to the logs on the inside and shelves were built along the interior walls. The entryway was lined with vertical boards which also lined the corridor leading down into the cellar room. Common wire nails were used throughout.

The second feature (Feature 2) consisted of two pieces of galvanized sheet metal found on the surface; one of these was corrugated. The sheet metal was attached with round common nails to 1 x 6-in boards at the ends and in the center. Surveyors were unable to determine a function for this feature since it was both isolated and destroyed beyond recognition.

Site 45-DO-210H held a rich historic artifact assemblage. Investigators noted a scatter of historic cultural debris on the surface, including metal, glass, ceramics, nails and a cast-iron woodstove. Excavations of prehistoric site 45-DO-211 uncovered many more artifacts, including a Chinese coin fragment and other artifacts possibly of Chinese origin, leading to the conjecture that the site was placer mined by Chinese workers. In an effort to determine possible occupants and/or site function, the historic artifact assemblage was collected for analysis.

Most of the historic cultural material was located in the southern portion of the site, designated Area B (Figure 5-1). The root cellar is located in the northwest part of this area, a few meters south of the central placer mining excavation. The northern portion of the site was designated Area A.

Over 900 historic artifacts were recovered; nearly half are metal scrap fragments recovered from Unit 8N0E in Area B. The total of 805 artifacts recovered from Area B includes artifacts primarily associated with homesteading. Figure 5-1 depicts the distribution of artifacts in both areas. In addition to metal scrap and strap metal from barrel hoops, the collection from Area B includes canning jar liners, zinc canning lid fragments and rubber gaskets for canning jars; a variety of ceramic patterns and plain white


70N
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Subsurface housepit
Prehistoric excavation unit
Prehistoric test unit
8
Prehistoric and historic excavation unit with historic artifact density
N
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Area B
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Feature 1
INSET
1
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12
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13
3
3
12
8
11
INSET

Figure 5-1. Cultural features, excavation units, and distribution of artifacts at placer mine 45-DO-210H For legend, see Appendix B.

earthenware fragments of unidentified vessels; and, tins for tobacco and tea. More personal items include a glass "ruby" inset for a pin or brooch and clothing fasterners such as buttons, safety pins, shoelace grommets, a buckle, and a garter buckle. Building materials include wire nails and a few square nails, tacks, screws and staples. The much smaller collection of 106 artifacts north of the placer excavation in Area A contained hob nails for miners' shoes and the Chinese coin fragment. These artifacts were located in Unit 68N20W, near the northern placer excavation.

Although the hob nails and the coin fragment may suggest Chinese mining activity, in general, the artifact collection offers little enlightenment about mining activities conducted at the site, let alone who the miners were or when they mined. Regional history suggests that a Chinese coin fragment could have been brought to the site whether Chinese miners were there or not. Likewise hob nails are not exclusively associated with miners' boots.

Chinese coins have been identified in a number of prehistoric and ethnographic sites in the Northwest, including a site in Bridgeport, Washington, identified as an "old Indian camp" (Beals 1980:66). Coins collected from shipwrecks off the coast were probably the first Chinese money to enter Northwest Indian trade routes. One such episode is the alleged Spanish shipwreck south of the Columbia River mouth early in the eighteenth century. From the wreckage, the native residents collected, among other things, square-holed Chinese coins to use as ornaments (Barry 1932:26). Subsequently, the coins were introduced during the maritime fur trade, particularly from 1785-1830, when many ships were manned by Chinese crews. By 1850, the coins were widely distributed throughout the Northwest by means of Native American trade networks (Beals 1980:69).

Except for hobnails, characteristically used in miners' boots, and the Chinese coin fragment, the remainder of the artifact collection at 45-DO-210H suggests homesteading activities after 1900. The majority of wire nails compared to a small number of square nails indicate a post-1900 time period (see Chapter 2). The few amethyst glass fragments are from vessels manufactured from ca. 1885-1917. This archaeological finding is supported by historic records which report homesteading in the vicinity by 1915 (General Land Office Records, Bureau of Land Management Archives, Portland).

A detailed inventory of the artifacts recovered from 45-DO-210H is given below.

BOTTLE AND VESSEL GLASS

Twenty eight fragments of amber, clear and amethyst glass as well as a piece of red faceted glass, a ring or brooch inset designed to resemble a ruby, were recovered. With the exception of a few contemporary amber beer bottle fragments, all of the bottle glass and the red glass inset were found in the east portion of Area B. Two canning jar liner fragments were recovered from the north portion of Area B. Most remaining fragments were located in Unit 16N0E. The amethyst glass fragments give a clue to the site's age and also indicate site disturbance. Amethyst glass was originally clear glass containing manganese oxide, manufactured from ca. 1885-1917 (Hunt 1959:10). Exposure to sun causes a chemical reaction that turns the clear glass the characteristic amethyst shade. Thus, even though the amethyst fragments were recovered 10-20 cm below the surface, at some time they were above ground and exposed to the sun.

CERAMICS

Fifty eight earthenware fragments, including many with varying types of surface decoration, were recovered from Area B, most from Unit 16N0E. Twenty seven fragments are plain white earthenware; one is a white hardpaste earthenware shard and three are pearlware fragments. The remaining 25 fragments are from two vessels (and possibly more). These fragments are of dark blue transfer earthenware with a curvilinear border pattern and a vase and floral motif (Figure 5-2). Handpainted gold bands highlight the raised dot and curve pattern on the interior rims of several fragments. No trademarks were recovered.

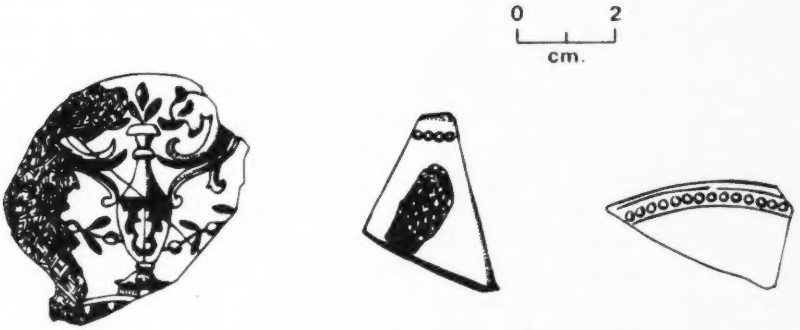

Figure 5-2. Dark blue transfer earthenware shards from 45-DO-210H.

METAL

Nails and Other Construction Fasteners

Twelve square-cut nails, 47 wire nails, two Hungarian shoe nails and 27 other construction fasteners were recovered.

The square cut nails include four 4d, one 3d and seven common cut nails with broken shanks. Nine were recovered from Area A, including four from Unit 68N20W, the unit next to the riverbank; three were recovered from Area B.

The Hungarian shoe nails or hob nails measure 4/8 in and were located in Unit 68N20W in Area A. The remaining construction fasteners include 19 tacks measuring 3/8 in, 1/2 in, and 5/8 in; two wood screws measuring 1 1/4 in and 1/2 in, one machine screw measuring 3/4 in, two wire staples; and, two wrought iron staples measuring 1 5/8 in and 1 3/4 in. All were recovered in Area B from the same units (8N6W and 8N0E) containing the wire nails, except for one wrought iron staple and two wire staples that were recovered from Unit 18N6W.

Tin Cans

One complete pocket tobacco tin, one resealable canister lid and one open-top fragment comprise the tin can collection. The open-top fragment was recovered from Area A, the resealable lid and tobacco tin from Area B. The resealable canister lid (4 3/4 in x 3 in x 3/8 in) has the stamped letters, HORMMANS PURE TEA, and a curvilinear design stamped around the edges (Figure 5-3). The pocket tobacco tin (4 1/4 in x 3 7/8 in) is a red can with a hinged lid and blue and yellow letters, including "...UNION LEAGUE," surrounded by a green and yellow design.

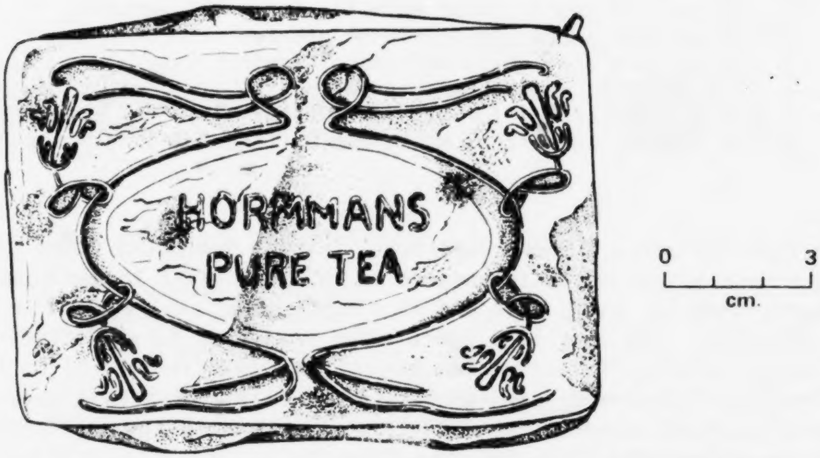

Figure 5-3. Lid from resealable tin canister from 45-DO-210H.

Cartridges

Twelve cartridges recovered from this site indicate small game and deer hunting, but whether all hunting was undertaken by the inhabitants is unknown. Most of the cartridges are types that have been available on the American market for 80-100 years and so are of questionable value in dating the site. The cartridges were evenly distributed between Areas A and Area B.

The inventory of cartridges from 45-DO-210H includes the following types: calibre long (Figure 5-4).

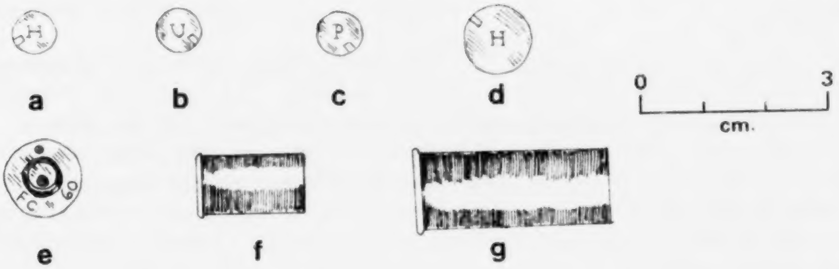

Figure 5-4. Headstamps and profiles of cartridges from 45-DO-210H.

a. .22 calibre short, Olin Mathieson Chemical Corp.
b. .22 calibre short, Union Metallic Cartridge Company
c. .22 calibre short, manufacturer unknown
d. .38 calibre long, Olin Mathieson Chemical Corp.
e. .308 calibre, manufacturer unknown
f. .44 Evans short(?) for Old Model Evans rifle and Winchesters
g. .44 calibre long for J.M. Marlin Ballard Sporting Rifle No.2

The four .22 calibre short cartridges (Figure 5-4;a,b,c) found at the site are from rimfire shells introduced in 1857 and still in use today. They are commonly used for small game and bird hunting, as well as self-defense (Barnes 1980:289). One cartridge bears a "U" trademark first introduced by the The Union Metallic Cartridge Company in 1885 (Mueller and Olson 1968:296). The "H" trademark (Figure 5-4;a) was first used by the Olin Mathieson Chemical Corps in 1905 (Mueller and Olson 1968:279). The four .22 calibre cartridges appear to have been shot from the same firearm.

The one .38 calibre long cartridge case found at the site is pictured in Figure 5-4;d. This type of rimfire cartridge was introduced in 1867 and had been discontinued by 1930. The case found at the site carries the trademark "H" first used in 1905 (Mueller and Olson 1968:279). This shell case then was manufactured between 1905-1930.

The one .308 (7.62) calibre shell cartridge (Figure 5-4;e) is a standard military type often used for deer hunting (David Munsell, personal communication 1983).

The three .44 Evans short cartridge cases (Figure 5-4;f); are of a type probably made for Old Model Evans rifles introduced about 1875, and loaded by Winchesters until the early 1920s (Barnes 1980:114). Box lots of the ammunition were available for purchase until 1940-41 (Barnes 1980:114).

The three .44 calibre long cartridge cases (Figure 5-4;g) are of a type first introduced for the J.M. Marlin Ballard Sporting Rifle No. 2 in 1875-76

(Barnes 1980:115). Barnes does not indicate when this type of shell went out of production.

Miscellaneous Metal

Miscellaneous metal found at site 45-DO-210H includes fragments of household paraphernalia and farming equipment. The artifacts were divided into buttons, other clothing fasteners, canning lids, harness fittings, and strap and scrap metal.

The three metal clothing buttons recovered include two plain overall buttons (with diameters of 2/5 in and 1/2 in) (Figure 5-5;a) and one clothing rivet (Figure 5-5;b), all found in Area B. One four-hole sew-through single cast button with a sunken panel and flat edge decorated with cross-hatching was recovered from Area A (Figure 5-F;c). Two circular high top shoe buttons were also recovered from Area A.

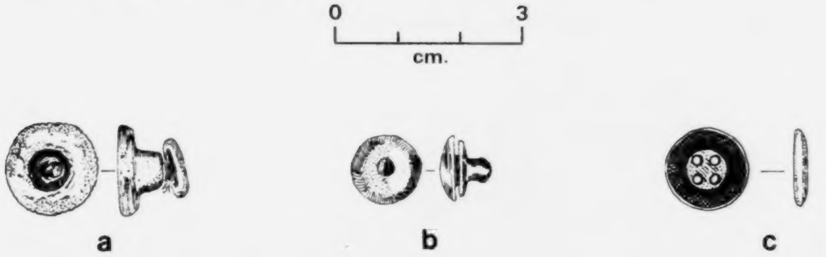

Figure 5-5. Buttons from 45-DO-210H.

a. Metal overall button
b. Metal clothing rivet
a. Metal single cast button

Several miscellaneous clothing fasteners were recovered from Area B. They included two gold colored safety pins (Figure 5-6;a), a copper shoelace grommet, and a small belt buckle (possibly a harness buckle) with a cross bar running lengthwise and prongs for two parallel holes (Figure 5-6;c). These were recovered from 18N6W. Three other copper shoelace grommets and a garter buckle (Figure 5-6;b) were recovered from 8N0E.

Thirty eight fragments of at least two zinc canning lids were recovered nearby in Area B, Units 16N0E and 18N6W.

Three fragments of horse tack were recovered in Area A. A stamped bridle rosette (1 3/8 in diameter) probably of brass, with a star in the center and a geometric design radiating from it, was recovered (Figure 5-7;a). Attachments on the back suggest a wire backing held the rosette to the bridle. Recovered with the rosette was a pronged clamp with the molded letters, "PACES BEST" (Figure 5-7;b). The clamp is likely a trademark tag from a saddle or other horse equipment. A third item is a decorative leather button probably from a saddle or bridle. The button is 3/8 in in diameter and has twelve small prongs with their ends bent toward the center (Figure 5-7;c).

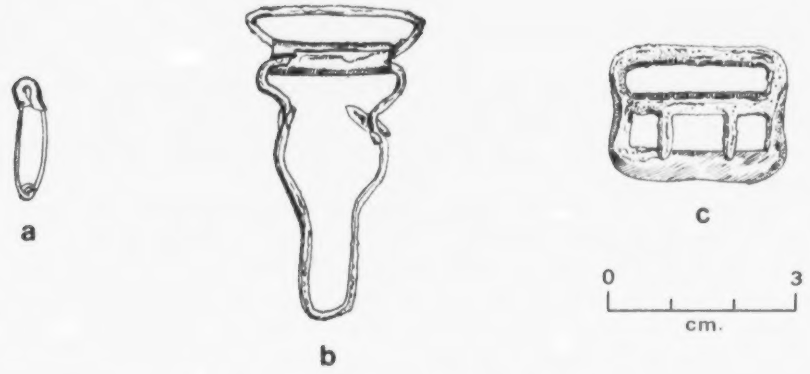

Figure 5-6. Clothing fasteners from 45-DO-210H.

a. Safety pin
b. Garter buckle
c. Suspender buckle

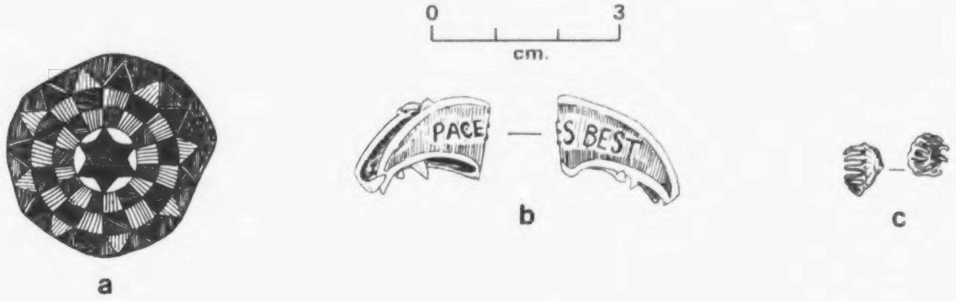
0
3
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Figure 5-7. Horse paraphernalia from 45-DO-210H.

a. Stamped brass(?) bridle rosette
b. Pronged saddle clamp
c. Saddle button

Five strap metal fragments, probably part of a barrel hoop, were recovered from Area B and 34 unidentifiable strap metal fragments were recovered from both Areas A and B. In addition, over 400 unidentifiable fragments of scrap metal were recovered, primarily from Unit 8N0E in Area B.

In addition to these groups of metal artifacts, excavators found three distinctive single metal items. A large grommet 7/8 in in diameter, designed for use with heavy material such as canvas, was recovered from Area B. A tin label measuring 1 1/4 x 3/4 in with the molded letters, "BANGLE" on it was recovered from Area A. The single prong on each end may have attached the tag to plug tobacco (Figure 5-8). A small fragment representing a square-holed cash coin, a type used in China for over 2000 years (Beals 1980:58), was also recovered in Area A (Unit 68N20W) (Figure 5-9). Such coins, usually made in small denominations, were circulated in strings of 10 or 100. Although such coins may be distinguished by characters representing the emperor's reign and title and the mint of issue, our fragment has only characters meaning roughly, "legal tender" on one side, and the symbol for a small coin denomination on the other (Jack Dull, Chinese Studies, University of Washington, personal communication 1983).

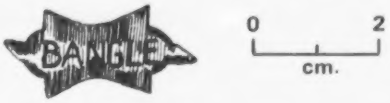


Figure 5-8. Tin tag for plug tobacco from 45-DO-210H.

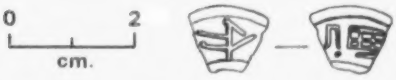


Figure 5-9. Chinese coin fragment from 45-DO-210H.

MISCELLANEOUS

An array of artifacts of several material types was found in Area B. Only one such object, a plastic shotgun wad, was recovered from Area A which also contained 59 fragments of window glass spread throughout several units. The items from Area B included 16 fragments of rubber gaskets from canning jars, all found in 16N0E and 18N6W, the same units where the zinc canning lids were found.

A number of paper fragments, some from a catalog and some of wallpaper, were found. The 12 wallpaper pieces, all of the same crosshatched brown design, were found in Unit 16N0E along with the canning fragments. Unit 10N10E contained paper fragments with advertisements for shirts, coffee, furniture and other goods printed on them. These paper fragments are presumably from a catalog.

Other fragments of goods, all probably associated with a habitation structure, included 25 fragments of clinker, remnants of coal burned in stoves. These were recovered primarily from Unit 8N0E. There were three leather fragments deteriorated beyond identification in Unit 12N4E and a fragment of knitted yarn, probably from the collar of a sweater, in Unit 16N0E. A nearby unit (10N10E), where the catalog fragments were found, contained three fragments of green paint.

The prehistoric component of this site, 45-DO-211, also proved to be of archaeological value. It was investigated and excavated in units dug both north and south of the major placer mine gully (see Lohse 1984b).

45-DO-219H

This site was owned by Jacob Daniel Lael, who took out a Stock Raising Homestead Entry patent on the property on January 3, 1927. Located in Section 35, Township 30 North, Range 30 East, the land was part of a 408.25 acre patent (General Land Office, Bureau of Land Management Archives, Portland). This type of patent granted the owner access to the surface resources but not to mineral rights, suggesting that Lael did not operate a placer mine on the property. However, the site was investigated because concentrated deposits of cobbles were found that resembled those of other mining operations. The prospect could have predated Lael.

Site 45-DO-219H is located on a low rocky peninsula, from 946 to 960 ft above m.s.l. on the south bank of the Columbia River, 1,230 ft upstream from RM 587 (Figure 1-1). Prior to the creation of Rufus Woods Lake, it was part of Buckley Bar and separated from the mainland by a perennial stream (U.S. Geological Survey map, Nespelem Quadrangle, 15', 1950). When we investigated it the site was bare of soil, which exposed granite and basalt cobbles. Vegetation included primarily juniper and pine trees which had been windswept along the upriver site perimeter. Driftwood was found on the ground and caught in the trees.

The only cultural feature noted at the site was a dirt road which ran parallel to the river on the Douglas County side of the site and ended at the present riverbank. The exposed cobbles showed no traces of a placer mining operation, leading investigators to conclude that the bare cobbles were likely caused by wind and water erosion. If a placer mine did exist at the site at one time, evidence of it is gone.

45-DO-247H

The first historic records for this site indicate it was part of a homestead entry patent taken by John R. Hopkins on February 23, 1914 (General Land Office Records, Bureau of Land Management Archives, Portland). The site is located in Section 35, Township 31 North, Range 29 East and the 1907 surveyor recorded no settlers in the township except "one or two Indians" (see Appendix A). Oral histories, however, suggest that the placer mine on the homestead was worked by the Chinese "in the very early days" (Bicentennial Association 1976:116).

The site is located on the step of a fairly wide terrace about 990 ft above m.s.l. on the south bank of the Columbia River, 495 ft upstream from RM 578 (Figure 1-1). Vegetation at the site was mainly cheat grass mixed with sagebrush although bitterbrush dominated in the mine. The steep, gravelly riverbank was being actively eroded by reservoir pool fluctuations at the time of excavation. A mine was identified in a rectangular cut, 100 x 350 x 4 ft, situated parallel to the riverbank. Its walls were reasonably straight and the floor was a flat expanse of gravels and cobbles. Two V-shaped trenches, oriented perpendicular to the river, cut the floor of the mine and river bank. These trenches could have been a natural erosional feature caused by water runoff although similar features at 45-DO-250H and 45-DO-200H appeared to have been caused by mining operations. No additional evidence was found to indicate the miners were Chinese.

45-DO-250H

This site is known locally as China Bar and reputedly was mined by Chinese (Fred and Harold Weber and George Thallheimer, personal communication 1977). Explicit dates for a Chinese occupation of this site were not obtained. Based on Symons' (1882) observations, however, mining was probably begun in the 1870s and lasted until about 1885. The latter date was when V.F. Hopkins, an American homesteader, probably settled at the site. Mr. Hopkins, an early farmer and orchardist in the area (Bicentennial Association 1976), owned 114.15 acres of property in Section 34, Township 31 North, Range 29 East, an area including the site. His homestead still stands at the end of China Bar (see Chapter 6).

45-DO-250H is on the south bank of the Columbia River, 2,050 ft upstream from RM 576 (Figure 1-1) on a low alluvial terrace between 946 and 970 ft above m.s.l. The site's dimensions are approximately 650 by 2,275 ft. It is not on the riverbank and so was not affected by the pool raise. The nearby riverbank is serrated by 10 to 20 ft mining trenches from 10 to 20 ft in depth. The trenches taper as they progress inland. During mining operations, soil had been removed from the entire mine, leaving stone piles and an exposed cobble substratum. This alteration of the landscape made identification of the site boundaries somewhat problematic until investigators noted that bitterbrush grew on the mine while the rest of the terrace was largely covered with sagebrush.

Two features, which appear to have been reservoirs, remained on the site. One was located in the approximate center of the site and emptied into the river by a narrow trench. Its measured about 180 x 300 ft and had straight walls and a flat bottom. The other water reservoir was located at the extreme upriver end of the site, where the naturally low topography required minimum excavation for construction. The west wall and portions of the south wall were the only sides that appeared to have been excavated. Like the preceding reservoir, this one also had a trench which emptied into the river. The east end of this reservoir had been breached, possibly during the mine's operation, so the floor was marshy during periods of high water. Local residents (George Thallheimer, Fred Webber,and Harold Weber, personal communication 1977) remember a wooden flume which ran from Elzy Creek, approximately one mile downriver, to the mine. Presumably, it carried water to the reservoirs and assured a continuous water supply for mining operations.

Surprisingly, there were no other cultural features, dwellings or refuse associated with the mine. They may have existed once because the mine was large and complex, but no evidence was found during the survey. Any evidence may have been lost in the previous pool raise when about 200 ft of shoreline was flooded. Or, Mr. Hopkins may have removed or destroyed remnants of the previous occupation when he homesteaded the property.

45-DO-257H

Land records indicate that this site, located in Section 35, Township 30 North, Range 30 East, was also part of the Jacob Daniel Lael homestead (45-DO-219H). The homestead consisted of 408.25 acres patented in 1924 (General Land Office Records, Bureau of Land Management Archives, Portland). It had been owned previously by Si Buckley who raised horses and lived in the vicinity of Buckley Bar (Bicentennial Association 1976:326). Since Mr. Buckley's interests were in husbandry just as Mr. Lael's were, it is doubtful that either of them mined the placer on Buckley Bar. It is more likely that it was mined by Chinese during the nineteenth century or others during economic depressions.

The site is located on the south bank of the Columbia River about 2,540 ft upstream from RM 587 (Figure 1-1), at an elevation of 950-969 ft above m.s.l. Munsell and Salo (1977) believed that the mine covered the majority of Buckley Bar, attributing the cobble and gravel surface over most of the bar to mining operations. The entire surface overburden, in fact, may have been stripped during mining operations; it may also have washed away during floods. Although the mine may not have covered most of the bar, there were distinct excavation traces on the downriver side where a series of small, parallel trenches was oriented perpendicular to the present river channel. Characterized by sandy, U-shaped bottoms and cobble and pebble sides, each trench was about 25 x 25 x 3 ft. All of them ended at the river. The trenches were located on the portion of the bar that was once connected to the mainland. This isthmus has since been flooded by the Rufus Woods Lake pool raise which has made Buckley Bar a year-round island. Poor preservation of the site complicated our interpretation, but at least a portion of it appears to have been a placer mine.

45-DO-259H

This placer mine was reputed to have been worked by Chinese during the last half of the nineteenth century (Fred and Harold Weber, personal communication 1977). This is consistent with land records of the property which indicate that a mine was in Lot 3 of Samuel Hammer's homestead in 1913 (General Land Office Records, Bureau of Land Management Archives, Portland). The site, as well as the homestead, is located in Section 8, Township 30 North, Range 29 East. The mine was on an alluvial terrace between 970-980 ft above m.s.l., on the south bank of the Columbia River, 820 ft downstream from RM 574 (Figure 1-1). Sagebrush and bitterbrush were growing on the site, but unlike China Bar (45-DO-250), vegetation was undifferentiated. The riverbank was steep and actively eroding: much of the mine had already been destroyed.

The mine's dimensions were about 130 x 1,138 ft, making it the largest placer mine still extant in the project area. The mine's long side was parallel to the river. A parallel series of smaller trench excavations was also perpendicular to the riverbank and a single large trench was parallel to, and approximately 100 ft inland, from the river. Although the trenches were partially eroded, the remnants of the trenches measured from about 7 to 15 ft wide, from 10 to 20 ft long and from 2 to 4 ft deep. They were V-shaped with walls of basalt and granite river cobbles. Fred and Harold Weber (personal communication 1977) suggested that the large trench parallel to the river was part of an open ditch that once brought water to the mine from Strahl Canyon.

There was no evidence of a dwelling or refuse at the site. Any that had been there are presumed to have been reoded away by the last pool raise.

45-DO-272H

The mine was located on property patented as a homestead by James E. McGlothern in 1914 in Section 36, Township 30 North, Range 27 East (General Land Office Records, Bureau of Land Management Archives, Portland).

45-DO-272H is along a small stream canyon on an alluvial terrace known as Allen Bar. Alluvium deposited by the Columbia River was overlain by an alluvial fan originating from the granite and basalt rimrock behind the site (Ula Moody personal communication 1978). It was on the south bank of the Columbia River, 1,885 ft upstream from RM 561 (Figure 1-1) at about 970 ft above m.s.l. (Figure 5-10). Vegetation in the stream canyon consisted of sagebrush and bitterbrush but was decidedly less dense than on the terrace. Stone cairns from the mining operation were found on the stream terraces that bisected Allen Bar. The ten features recorded at the site are listed in Table 5-1.

Feature 2, believed to be a house of some sort, was reminiscent of remains found at 45-OK-182H, the reported Chinese dugouts. This feature consisted of a flat-bottomed excavation, about 9 x 12 x 3 ft, which was lined

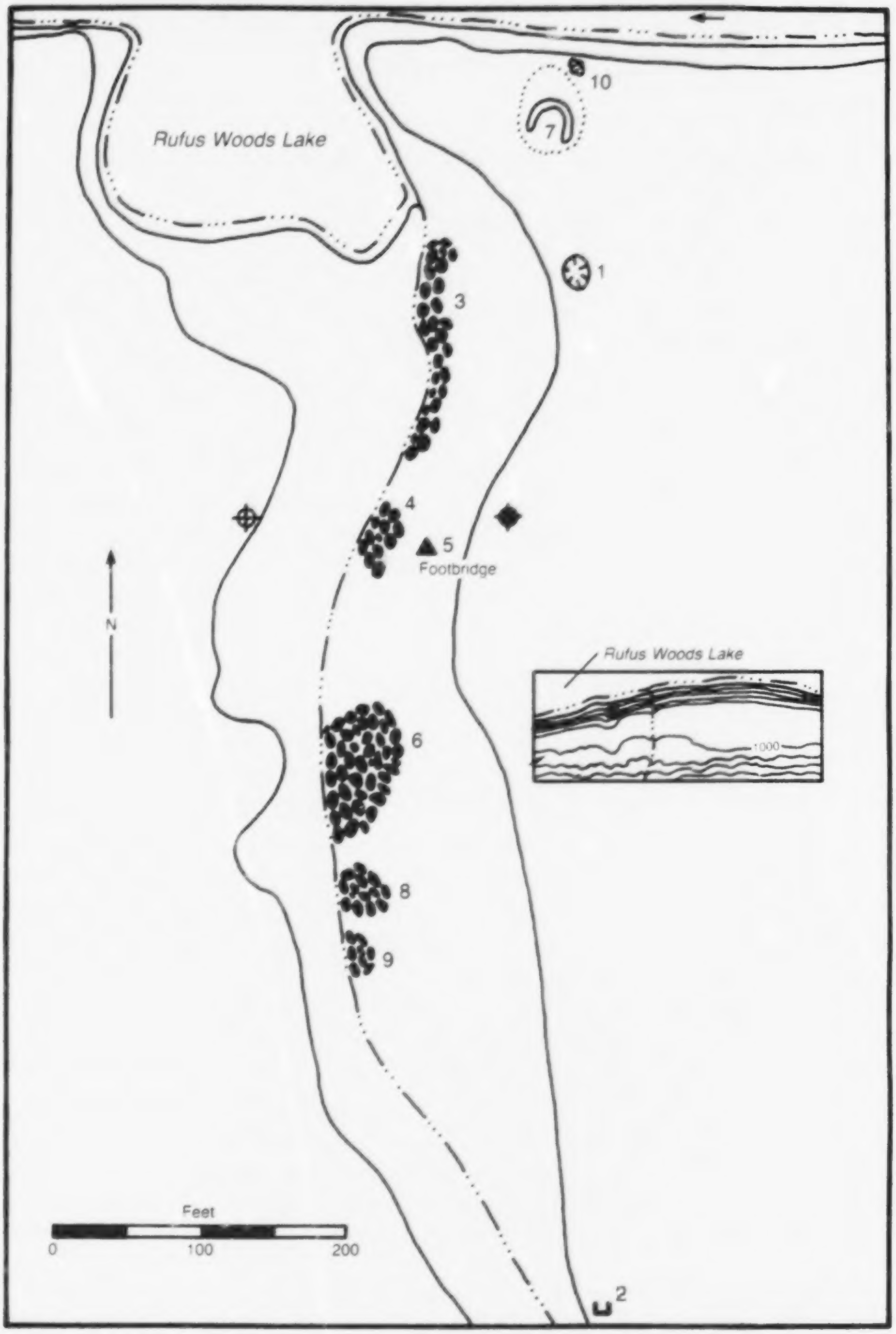

Rufus Woods Lake
10
7
1
3
4
5
Footbridge
N
Rufus Woods Lake
1000
6
8
9
Feet
0
100
200
2

Figure 5-10. Placer mine 45-DO-272 and cultural features identified. For legend see Appendix B.

on three walls by cobbles. The cobble pattern suggested a collapsed wall or foundation.

Table 5-1. Feature types and dimensions at 45-DO-272H.

Feature	Type	Dimensions (ft)
1	Depression	17 x 20 x 4
2	Dwelling (?)	9 x 12 x 3
3	Cairn	171 x 19.5
4	Cairn	43 x 22.5
5	Footbridge	6.5 x 8.3 x 2.3
6	Cairn	96 x 55
7	Refuse dump and earthenwork	58 x 31 x 1
8	Cairn	37 x 39
9	Cairn	29 x 14
10	Depression	8.5 x 12.5 x 3

Neither of the two depressions (Features 1 and 10) were identified by function or cultural association. Feature 1 had no timbers or stones to indicate its use. During the 1978 field season, the depression was apparently being used as a cattle wallow. Although its size and shape were reminiscent of a root cellar, Feature 10 contained no timbers or stone alignments to confirm this.

The refuse dump and earthenwork (Feature 7) contained artifacts associated with the American homestead era. The majority of the small number of artifacts had a domestic function. For example, food tin cans, a pot handle, a canning jar ("Economy Jar-Kerr Glass Co."), a glass canning jar lid ("Genuine Boyd"), and a white earthenware fragment were found. The single personal object located was a "Prince Albert Tobacco" can and the only agricultural object recovered was a cast-iron plow moldboard marked "Syracuse Chilled-New York, 601." A moldboard with a similar trademark was found at the Galler Allotment 45-OK-220H.

The remaining features at this site were found on the stream terraces in the canyon. The five cairns (Features 3, 4, 6, 8 and 9) were constructed of basalt and granite stone, presumably removed from the streambed along with the placer gold. The cairns were quite large, ranging in size from 14 x 29 ft to 20 x 171 ft.

A possible footbridge (Feature 5) was found across the creek bed. It was built of stream cobbles and filled with soil. The possibility that this structure was a dam was considered but rejected because of its small size and the absence of highwater marks which would have resulted from a reservoir. Nevertheless, identifying the structure as a footbridge was highly tentative since the "bridge" interrupted the flow of the stream. Possibly, the structure was part of the placer mining operation.

The mine at 45-DO-272H differed from all others in the project area since it was along a stream instead of a river bar or terrace. The only other known placers that were mined along streams were the Peabody and Wickman placers, both on the Nespelem River outside of the project area. Both of these mines were worked by American miners; whether Chinese miners also worked small stream mines is unknown.

45-OK-277H

A homestead taken by Gilbert V. Murray in 1925 (Assessor's Office, Okanogan County Courthouse) included portions of a placer mine. The homestead consisted of Lots 1 and 2 but the mine extended beyond its boundaries in Section 11, Township 30 North, Range 28 East.

Now on property owned by Chief Joseph Orchards, this placer mine is on the north bank of the Columbia River 1,885 ft downstream from RM 570 to 820 ft upstream from RM 571 (Figure 1-1). Most recently, it was worked by two partners during the early 1950s using rented Okanogan County road building equipment (George Wells, personal communication 1977). Field observations and informants' reports indicate that only about one-third of the total mine was worked in this manner. Earlier mining was done without the aid of heavy equipment. The section that was worked with road machinery was located from 946 to 980 ft above m.s.l. on a low alluvial terrace and the slope to a higher terrace. The most pronounced excavations were found on the slope behind the lower terrace. Three main excavations, roughly fan-shaped, funneled down to a point near the riverbank. These were formed by pulling the overburden and gold-bearing deposits down to the lower terrace with a dragline. An earthen mound and the remains of a sheet metal sluice were found near the riverbank at the base of one of these. Smaller excavations, located along the lower terrace, resembled "borrow pits" and presumably were opened with bulldozers. A road which ran lengthwise along this terrace probably was used to transport the earth from the other excavations to the sluice.

The remainder of the mine was found on the 1000 ft terrace. This section appeared to have been worked with hand-operated equipment. Like other placer mines in the project area, it consisted primarily of V-shaped excavations choked with river worn cobbles and gravels. No positive date for the operation of this section could be obtained, but it was probably worked prior to the 1950s (George Wells, personal communication 1977). Although Mr. Wells could not identify the miners, presumably they did not begin work until after the Colville Reservation was opened for mineral entry in 1898.

In addition to the placer mine, farm machinery and three buildings were located at the site. These had been moved there and were assumed to belong to the Wells ranch which shares a boundary with the Chief Joseph Orchard. Several rock piles were noted. The stones had been cleared from nearby fields and thrown into the large placer excavations. Several barrel staves and board piles were also found, but there was no trace of the Murray homestead.

6. HOMESTEADS

Settlement in the project area was later than in the Big Bend region as a whole. About 1880, the earliest General Land Office survey indicates that only Chinese miners and Indians occupied the river terraces (Mann 1883: General Land Office Field Notes, see Appendix A). A settlement at Condon Ferry began about 1885, but it was based on transportation and trading rather than on agriculture (Weber and Wyborney 1970; Ruby and Brown 1974). The first known homesteader, Vernile F. Hopkins, arrived in the project area about 1884 (Bicentennial Association 1976:198).

The majority of homesteads that we investigated were taken under conditions stipulated in the 1862 Homestead Act although one was a preemption homestead acquired by cash entry. Most homesteaders were farmers who raised wheat and other grain crops on the flat, better watered terraces. During the height of the homesteading era, fruit growing was also important. Despite the initial promise of homesteading, settlers began abandoning the project area by the 1920's as a consequence of drought, inadequate irrigation, and other economic factors. Within a few years after World War I, most homesteaders had departed (Bicentennial Association 1976:87).

Although it was short-lived, the homesteading era had an impact on the historical development of the region. Thirteen sites in the project area were homesteads. Our historical surveys of them are summarized below.

45-DO-187H -- VAUGHAN/BRANDT HOMESTEAD

Land records indicate that this property was first owned by Franklin W. Vaughan who took a homestead entry patent on Lots 1 and 2 of Section 30, Township 30 North, Range 27 East in 1912 (General Land Office Records, Bureau of Land Management Archives, Portland). Field notes from a 1908 survey, however, indicate that Vaughan had occupied the property for some years previous and the "value of his improvements" consisted of "house, barn, orchard, fences, irrigation, and cultivated land (worth) $4,000.00" (General Land Office Records, 1908). The site is on the south bank of the Columbia River 328 ft downstream from RM 556 (Figure 1-1) at an elevation of 960 to 970 ft above m.s.l.

Munsell and Salo (1977) believed this homestead was associated with the Brandt family. The present historic survey neither confirmed nor disproved this. Since the Brandts were known as an early homestead era family in the Peral Hill-Bridgeport area, they may have bought the property from the Vaughans.

Several of the buildings and structures found at the site date to the 1960s and were not part of the original Vaughan homestead. It was located closer (3,960 to 5,092 ft north of Section corners 29, 30, 31, and 32) to the pre-reservoir river and is now inundated (General Land Office Records, 1908, Appendix A). This is confirmed by an aerial photograph of the site in 1952 which shows evidence of five buildings or structures concentrated along the river bank (U.S. Army Corps of Engineers Archives, Seattle District). The present site is on a higher terrace approximately 600 ft back from the old riverbank.

The few features found in the historic survey, tentatively assumed to be associated with the Vaughan homestead, include a stone foundation (Feature 17) and the orchard trees (no feature number). A plow (Feature 6), a wagon (Feature 7), a tree (Feature 9), and a car body (Feature 25) also are possibly associated with the homestead. These older features are circled in Figure 6-1. The other features are of more recent vintage. Table 6-1 lists feature types and dimensions at 45-DO-187H, and Figure 6-1 identifies them and shows where they were located.

Feature 17, the stone foundation, was found on the river beach and was inundated during periods of high water. Constructed of angular granite and basalt cobbles, now partially buried in the sand, the 22 x 27 ft foundation was large enough to be that of a barn. Each wall was two stones wide and one stone high. Only the perimeter of the foundation was located; it probably held a wood sill.

Feature 6 was a horse-drawn plow built of cast iron. It had two shares that were stabilized by the farmer's weight as he stood on a platform over them keeping the shares pressed into the ground. The plow may have been retrieved from the old Vaughan homestead and not used on the present site.

The wagon (Feature 7) was believed to be associated with the Vaughan homestead because its style predates the more recent uses of the site. Only the front axle, tongue and hardware of the wagon remained. One piece of cast iron was embossed "M L & C."

The car body (Feature 25) was found in the river and only could be seen when the water was low. It was identified as a 1940 Ford sedan.

The orchard was upriver, and a little inland of the buildings. Most of the trees were old and had been uprooted to prevent the spread of disease and insects common in abandoned orchards (Fred Weber, personal communication 1977). All the trees were fruit trees but their types were not identified One homesteader interviewed by Bicentennial Association (1976:133) recalled that peach trees grew at the Vaughan place.

All other features at the site seemed to postdate the formation of Rufus Woods Lake and were used into the 1960s. This conclusion is based on dates found on magazines and newspapers taken from the dwelling and refuse dump. Consequently, they are not described here. Some of this uncataloged material may have originated at the Vaughan homestead and been moved to the locations used recently.

Evidence of extensive post-reservoir activity included the animal shelter (Feature 2), the board piles (Features 11 through 14) and the log piles (Features 16, 19, 20, and 21). All of these were remnants of buildings that

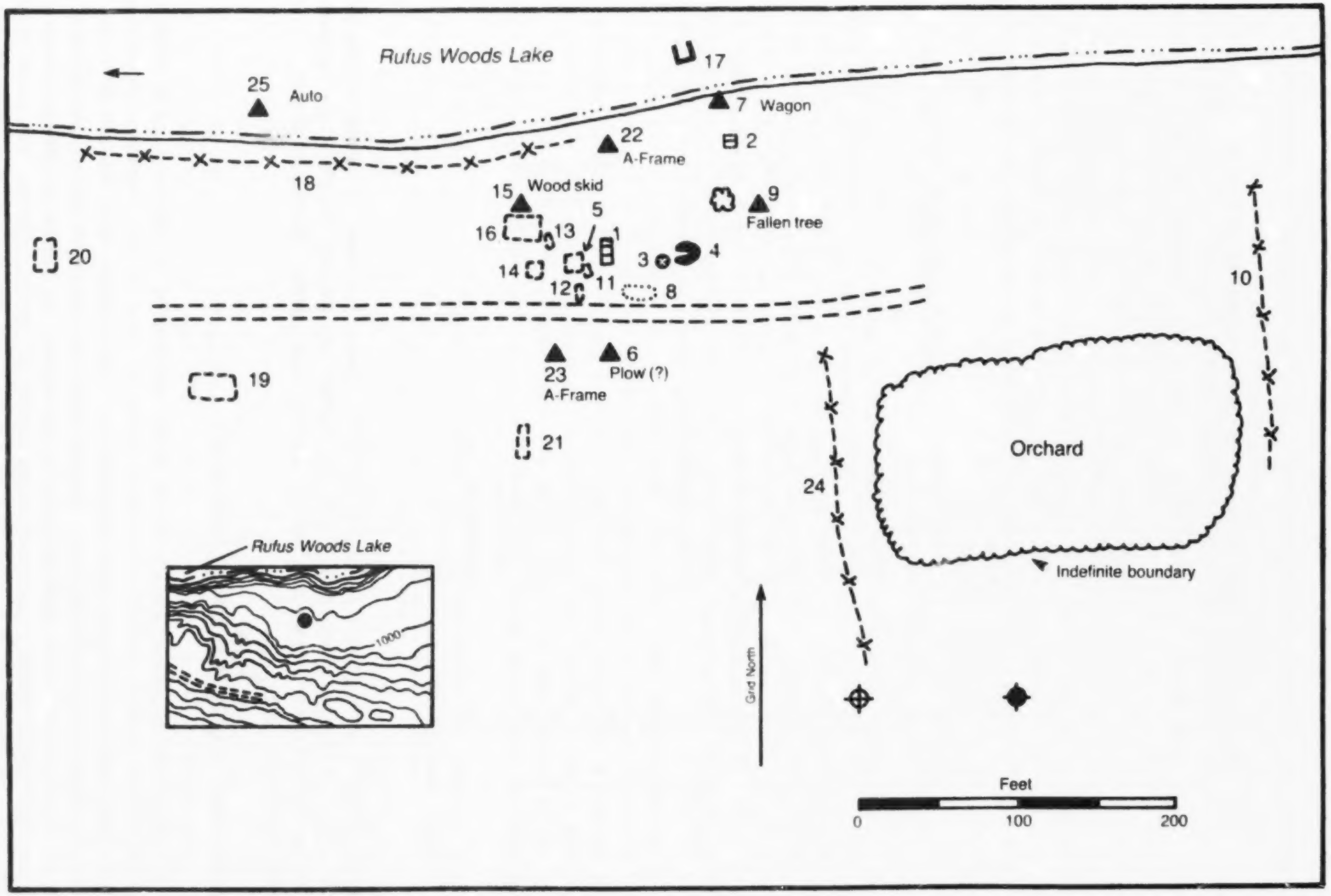

Rufus Woods Lake
17
25 Auto
7 Wagon
22 A-Frame
2
18
15 Wood skid
5
9 Fallen tree
16
13
1
20
3
4
14
10
12
11
8
6 Plow (?)
23 A-Frame
19
21
24
Orchard
Indefinite boundary
Rufus Woods Lake
1000
Grid North
Feet
0
100
200

Figure 6-1. Vaughan/Brandt Homestead (45-DO-187H) and cultural features identified. For legend, Appendix B.

Table 6-1. Feature types and dimensions at 45-DO-187H.

Feature	Type	Dimensions (ft)
1	Dwelling	12.3 x 28.7 x 14
2	Animal shelter	12 x 14 x 8
3	Privy	5 x 5 x 7.4
4	Root cellar	8 x 17 x 8
5	Collapsed building	22 x 22
6	Plow (?)	5.5 x 6
7	Wagon	5 x 6
8	Refuse dump	16 x 35 x 6
9	Fallen tree	53 x 84
10	Fenceline	---
11	Board pile	5 x 16
12	Board pile	3.5 x 16
13	Board pile	5 x 12
14	Building parts	20 x 20
15	Wooden skid	5.5 x 13
16	Log pile	31 x 46
17	Stone foundation	22 x 27
18	Fenceline	---
19	Log pile	35 x 61
20	Log pile	25 x 44
21	Log pile	11 x 40
22	A-Frame	7.5 x 15
23	A-Frame	6 x 11
24	Fenceline	---
25	Abandoned car	---
--	Orchard	---

were salvaged and stored on the property. Several of our informants had torn down old buildings along the river for materials to use on their own property (George Thallheimer, Fred and Harold Weber, and James Short, personal communication 1977).

45-DO-199H -- GERDEMAN/SYNDER HOMESTEAD

This site is on property first owned by Edward F. Gerdeman, who took out a cash entry patent on Lot 1 in 1914 (General Land Office Records, Bureau of Land Management Archives, see Appendix A). The placer mine 45-DO-200H was also located on this property in Section 10, Township 30 North, Range 28 East. Gerdeman may have been preceded on this property by a family named Synder (Fred and Harold Weber, personal communication 1977). (Note: the name appears only once in the transcript of the interview and is spelled Synder. It may be a typographical error.)

According to Munsell and Salo (1977), the site is located about 960 ft above m.s.l. on a low level terrace covered with grasses and occasional sagebrush on the south bank of the Columbia River, 495 ft downstream from RM 569 (Figure 1-1). Archaeological material consisted of glass and metal debris, rock alignments and a structural depression. The site was in such a poor state of preservation that the 1977 historic survey would not have located it without the aid of Fred and Harold Weber who were using the area as a dump for burning dead livestock. The depression was littered with animal bones. Additional historic data was found on a 1915 Douglas County Directory map which showed a single building on the property. None of the archaeological features we located could be conclusively associated with this building.

45-DO-226H -- JONES HOMESTEAD

The earliest land records relating to this site show that it was owned by William Jones who took a homestead entry patent on it in 1913 (General Land Office Records, Bureau of Land Management Archives, Portland, Appendix A). The 1915 Douglas County Directory maps indicate that Jones held Lot 4 in Section 22, Lot 4 in Section 27, and Lot 1 in Section 34, encompassing a total of 106.60 acres. All of these properties were located along the river. The only building shown on the maps was in Lot 4 of Section 27, Township 30 North, Range 30 East, where the site was located.

The Jones Homestead is farther from the river than most sites in the project area. It is on the south bank of the Columbia River, 3,115 ft upstream from RM 586 (Figure 1-A) at 1,050 ft above m.s.l. on a rather steep slope cut by two annual streams. Grass, some sagebrush and lamb's quarters grow on the site. Lamb's quarters, in particular, is associated with disturbed soils in the project area. Domestic trees were also noticed by investigators.

Generally in a poor state of preservation, the site included only five features, and informants were unable to add to the sparse archaeological evidence. The features were identified as follows.

A root cellar (Feature 1), measuring 16 x 16 ft was a wooden building constructed in a squarish excavation that had been backfilled for insulation. As well as differing in shape from the more common rectangular cellars, it was dug into the ground surface rather than into a hillside. The single 6 x 6-in timber found in the cellar suggests it had a gable roof. Remnants of the roof and wall were found along two sides of the pit. Stones embedded in the earthenwork marked a 3-ft opening which was the single doorway to the cellar. Round common nails were used in construction. Some of the timbers were charred, an indication of a grass fire or perhaps an attempt to preserve the buried timbers.

The function of a rock wall (Feature 2) on the property was not determined. Constructed of stacked basalt stones, forming a semicircular wall near a basalt outcrop, it was probably decorative.

The road recorded by Munsell and Salo (1977) was tentatively identified and numbered Feature 5. Found in a rocky area, it was a 5-ft rock-gree band vaguely outlined by stones. Beyond this rocky area, the road disappeared.

The locust trees (Feature 3) were found near the rock wall. They appeared to be as old as the homestead although some were undoubtedly seedlings from the original plantings. Since the trees might have been planted for shade, the survey team searched for buildings in this area, but did not find any. Willows and poplars made up the site's other copse. These were also old growth and probably associated with the homestead. Boards were found near the trees but in no discernible pattern.

Although the site was littered with objects, none were found in concentrations that suggested specific building locations or functions. The following is a list of objects found at 45-DO-226.

Domestic Objects: door handle and lock plate, door hinge w/round nails, cast-iron stove parts.

Transportation Objects: horseshoe, wagon parts, "Star" buggy or wagon step, leaf springs.

Agricultural/Industrial: iron file, turnbuckle.

Miscellaneous Objects: iron rod, unidentified iron object, galvanized sheet metal.

The stove parts were by far the most striking artifacts at the site. The two stove doors were embossed with "Argard Perry & Co. - "ARGARD PERRY & CO. - STOVE - RANGES" which was surrounded by scrolls, leaves, and flowers. The stove top was embossed with "FAMILY ARGARD * NO. 7-18 - 1866." The date is most likely a patent date for the stove and not the year of its manufacture.

45-DO-241HD -- WINSHEIMER HOMESTEAD

The earliest land records of this site indicate that it first belonged to Thomas Winsheimer who obtained it by homestead entry patent in 1914 (General Land Office Records, Bureau of Land Management Archives, Portland). Mr. Winsheimer was an Austrian who mined or prospected in the Nespelem Mineral District (George Thallheimer, personal communication 1977). His property included Lots 1, 2, and 3 of Section 6, Township 30 North, Range 30 East, for a total of 98.40 acres. A 1915 Douglas County Directory map showed a single building in Lot 2, but the buildings at the site were all in Lot 1. This may have been a cartographic error since no other buildings were observed on the site terrace.

The site is on the south bank of the Columbia River, 655 ft downstream from RM 580 (Figure 1-1) at 1,050 ft above m.s.l. on a relatively flat, small terrace (Figure 6-2). Stream canyons, which drained into the Columbia River, cut the terrace on two sides. The vegetation was primarily grasses, with

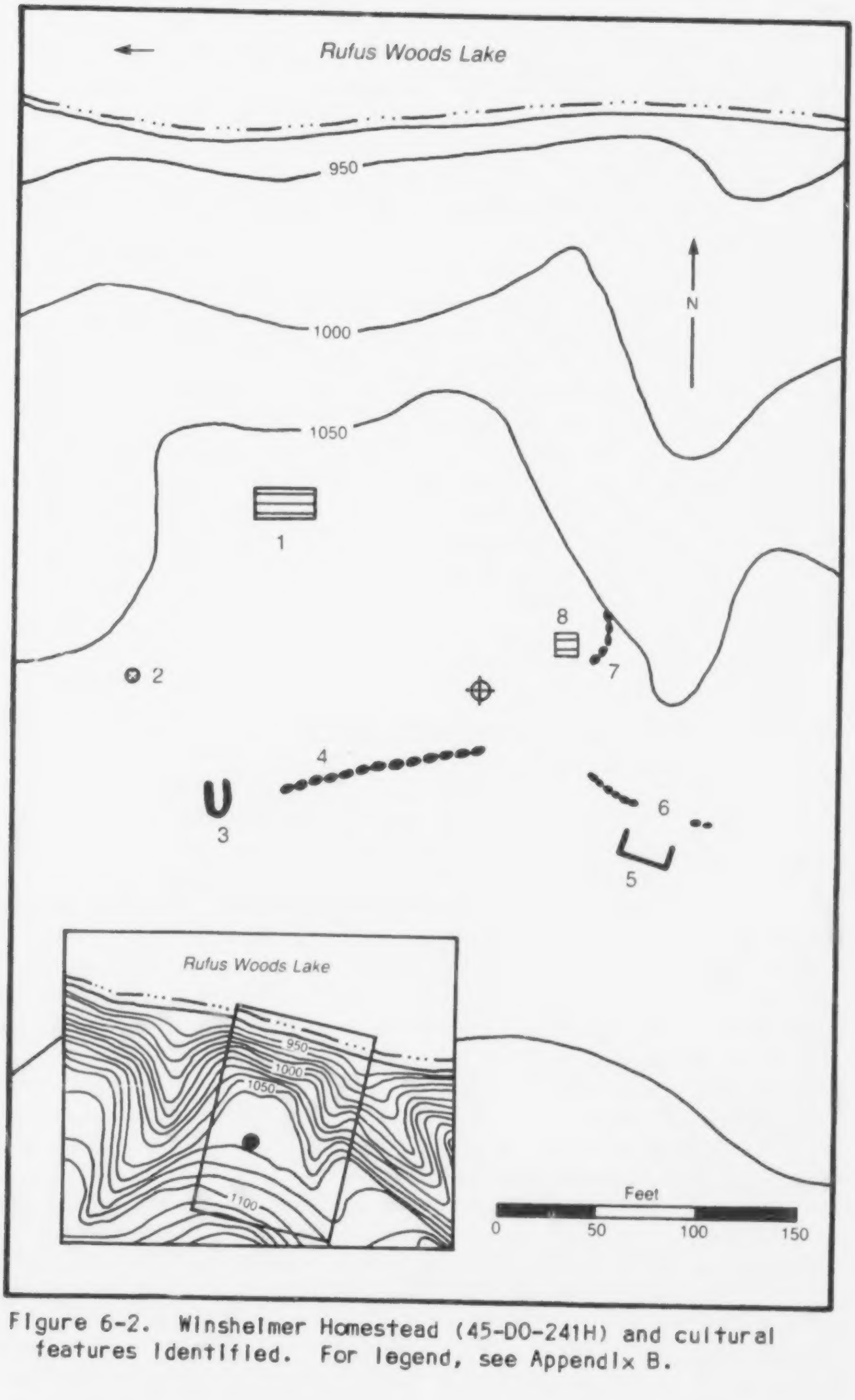

Rufus Woods Lake
950
1000
1050
N
1
2
3
4
5
6
7
8
Rufus Woods Lake
950
1000
1050
1100
Feet
0
50
100
150

Figure 6-2. Winsheimer Homestead (45-DO-241H) and cultural features identified. For legend, see Appendix B.

scattered bitterbrush and rabbitbrush. Ponderosa pines grew on the terrace and in greater concentration along the streams.

The buildings and structures associated with this site were among the better preserved and the most esthetically pleasing of all the historic features in the project area. This was due, in part, to the excellent stone masonry. The features identified are listed in Table 6-2 and shown in Figure 6-2.

Table 6-2. Feature types and dimensions at 45-DO-241H.

Feature	Type	Dimensions
1	Dwelling	14.5 x 32 x 17
2	Privy (?)	6 x 7
3	Root cellar	17 x 19
4	Rock wall	1.5 x 100.5
5	Stone foundation	16 x 24 x 5.5
6	Retaining wall	5 x 29
7	Retaining wall	1 x 30 x 1.5
8	Shed	12 x 19 x 7

There were four buildings at the site. All of them were well built and had commercially manufactured parts. Feature 1 was a one-story, two-and-a-half room frame dwelling (Figure 6-3). Built on a slight slope toward the edge of the terrace, it was leveled by vertical log footings at each corner. Footings were also placed in the center sections along the perimeter of the foundation to elevate the sills. They also supported a medial girder that ran the length of the house. There was a small dugout area under the southeast corner of the house which may have been a cellar. Above ground surface, the walls of this room were horizontal logs and the skirting enclosing the foundation was made of vertical boards. Access to the cellar was probably through a doorway in the skirting, since an entrance was not found inside the house. The house floor was made of 1 x 12-in planks covered by a finished floor of tongue and groove boards. A medial wall across its width divided the house into two rooms. This wall, and all other interior walls, were constructed of horizontal ship-lap boards nailed to 2 x 4-in studs. A single door provided passage between the rooms. The door and door framing were commercially made and painted black. A small built-in partition, 35 x 5 ft, probably a closet, was found in the southeast corner of the western main room. In the northwest corner of the west room was a triangularly-shaped cupboard which could be fastened to two walls. A stove pipe hole in the ceiling was found just outside the closet in the western room. Ship-lap boards completely enclosed the ceiling; the only entryway to the attic was through a square trap door. The exterior of the house was covered by horizontal 1 x 2-in board planks and then finished with thin horizontal clapboards. This siding continued on into the gable ends. The east and west walls each had one door

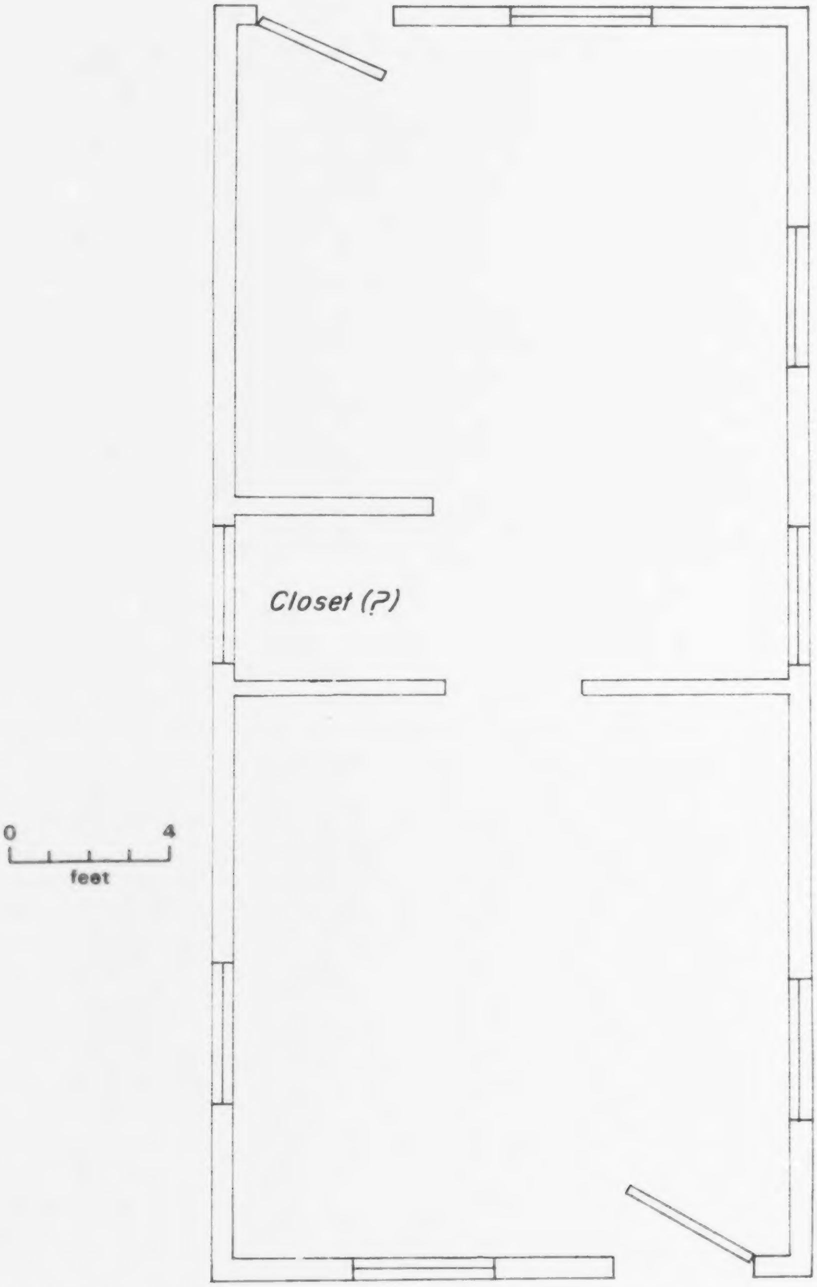

Closet (?)
0
4
feet

Figure 6-3. Dwelling floor plan (Feature 1), Winsheimer Homestead (45-DO-241H).

to the outside. One door was missing and the other had been vandalized. The house had seven windows: three on the south wall, one each on the west and east walls, and two on the north wall. The exterior window casings were rough lumber, but the interior ones were commercially made and had miter joints and sills. The sashes and window glass were gone, presumably salvaged. The roof was covered with wooden shingles. Round nails were used to construct the building. Iron butt hinges were on the doors.

Feature 2 was tentatively identified as the foundation of a backfilled privy pit. Constructed of tabular granite stones and roughly fitted without mortar, it had been built along the rim of the stream canyon at the western margin of the site. This location may have been chosen to avoid digging a hole, since the stone walls were built against the canyon bank in a way that a hole was formed. The single timber found with the feature resembled a fence post rather than the remnant of a building. No boards or logs were found in the canyon below, suggesting that the superstructure had been salvaged.

The root cellar (Feature 3) was a squarish excavation dug into the hillside at the southern margin of the site. Unlike the other root cellars in the project area, there was no sign of a wooden building so the earthenwork alone probably formed the walls of the cellar. Inside, split logs partially covered with stone and sod were found on the ground. These were most likely the remnants of a gabled roof.

Feature 5 was the stone foundation and structural remnants of a building located at the base of a hill on the southeastern margin of the site (Plate 6-1). The masonry of the foundation was of exceptional quality (Plate 6-1). Three walls--east, west, and south--were found. Each was made of granite stones of varying sizes, carefully laid so that the integrity of the structure relied more on gravity than on the mud mortar. Each wall was about two stones wide or a maximum of about 1.5 ft. The walls were straight and uniform; and the stones were unweathered hues of pink, white, and light gray, contrasting with the nearby outcrops of black granite. Above the foundation, the building had been burnt, leaving only a few collapsed timbers. The building seems to have been a heavy frame construction with some lighter lumber used for finishing. It probably resembled the shed (Feature 8) in its manner of construction. All three foundation walls had sill remnants. Other timbers appeared to be square hewn and were fastened by square notching and square cast-iron spikes. To one timber, perpendicular lighter boards were attached with round nails. Girders had been tenoned into four mortises in the south face of the foundation. The mortises were about 4.5 ft above the ground and spaced at 4.5 ft intervals. This allowed for a cellar space beneath the building. Access from the building to the cellar was through a trap door in the floor near the southeast area of the foundation; a stair frame was found in this corner. Since only nails and a single strap hinge were found, the building's function is unclear. Its position and construction do suggest it may have been a barn.

Feature 8 was identified as a shed used to shelter small livestock. Built into the slope of a ravine on the east side of the site, the structure was located at the rear of a narrow terrace retained by a granite wall (Feature 7). It was a sturdy, well-preserved building, despite the several types of

a. Facing southwest.

b. Close-up of southern face and four mortises where girders were tenoned.

Plate 6-1. Stone foundation (Feature 5) at Winsheimer Homestead (45-DO-241H).

building materials used to construct it. Like some root cellars, it was built inside an excavation in a slope and then partially backfilled. Its west wall, like the foundation (Feature 5), was built of carefully laid, dressed granite stones; no mortar, however, was used. The 1.5 ft thick wall could have stood by itself; stone was probably used to prevent rot. The north and south walls were constructed of horizontally stacked railroad ties which were not fastened to the stone wall but held in place by the backfill. The ties were rotting and backdirt was filtering into the shed. At the front of the shed the ties were nailed to vertical corner posts. The front or east wall was framed with railroad ties and then covered with vertical boards. A single door and window were placed in the front wall; both door and shutter were built of vertical boards. The building had a shed roof with driftwood pole rafters. The rafters were covered by board sheeting followed by a single layer of wooden shingles. Hardware associated with the shed included round common nails, cast-iron square spikes, wrought iron staple hooks and a hasp. Some railroad spikes were found in the vicinity of the shed, but were not used in its construction.

Two structures (Features 4 and 6) were found at the site in addition to the retaining wall (Feature 7). Feature 4 was a rather long rock wall, poorly made in comparison with the other masonry found at the site. Some basalt and granite stones were stacked to form the wall although other stones appeared simply to be heaped into a pile. Since the rock pile was located at the south end of the site along the foot of a slope, it may have been nothing more than an attempt to curb the flow of rubble. A loose aggregate of granite stones and scattered lumber (Feature 6) was concentrated at the head of a small gully. It extended beyond the gully in an interrupted line in front of the stone foundation (Feature 5); this too probably was a poorly constructed or poorly preserved retaining wall.

A small number of scattered artifacts were found at the site, but no refuse dump area was identified. This small yield can be explained in at least two ways: 1) all loose debris was thrown into a refuse dump which was not found during the survey; or, 2) the site area was "collected" by amateurs previously. The survey team did record tin cans of various shapes and sizes, kerosene lamp parts, two plowshares, pipe fittings, wooden boxes, scrap sheet metal and a horseshoe.

45-DO-245H -- ROD HOPKINS HOMESTEAD

This property was first owned by Rod Hopkins who took a homestead entry patent on Lot 2 of Section 35, Township 31 North, Range 29 East in 1914. The patent included 158.75 acres (General Land Office Records, Bureau of Land Management Archives, Portland). Hopkins was living already at the homestead in 1908 when a surveyor described his property as a house, fences, and cultivated land, worth $1000 (General Land Office Field Notes, Appendix A). He occupied the property until about 1954 when he sold it and moved to Belvedere (George Thallheimer, personal communication 1977).

Rod Hopkins was one of the better known homesteaders in the project area because he operated a ferry (45-OK-249H) in the 1920's and 30's. In addition to this, according to Bicentennial Association (1976:116), he made a living by raising "hay, cattle, and horses. In later years he had a herd of sheep."

The homestead site is on the south bank of the Columbia River, 1,100 m downstream from RM 579 (Figure 1-1) 1,000 ft above m.s.l. on a fairly level terrace parallel to an annual stream canyon. Most of the terrace was under cultivation when visited by the survey crew in 1977. Only sagebrush and grass grew in the immediate vicinity of the site and along the steep riverbank.

Only five features were found. The log house, remembered by Hopkins' daughter and recorded by the 1908 survey of the property (Bicentennial Association 1976:116 and General Land Office Field Notes, Appendix A), was designated Feature 1 (Figure 6-4). It was a one-story, single room log cabin built of square hewn logs laid on a foundation of fieldstones. The logs were fastened by square notching at the corners, and chinked with triangular wood strips, concrete, and bark. Like several other cabins in the project area, the gable ends were enclosed with vertical boards. On the east side, a 13 x 13-ft open porch extended the overall length of the house to 35 ft. The porch's poor condition made it difficult to describe; however, it was built of lumber joists lying on the ground and covered with 1 x 12-in boards. The house roof was constructed of 1 x 12-in boards nailed to rafters covered partly with several layers of tarpaper and partly with sheet metal, suggesting that the roof had been patched several times. The single room was partially divided by a closet and shelf partition which extended into the room from the north wall. The walls were covered with 1 x 12-in boards over which white and silver wallpaper, now in poor condition, had been hung. Boards, and then a layer of cardboard, covered the ceiling. The two stovepipe apertures in the ceiling indicated that the house had two stoves. The cabin's interior must have been dark as there were only two windows, one in the south wall and the other in the north. The windows had rough frames of a rectangular shape, suggesting that they were double sashed. There were three doorways--one each in the center of the east and west walls and one toward the southeastern corner of the south wall. Two of the doors were found; both were commercially made.

Feature 3 was a single room, one-story log barn (Figure 6-5). The foundation consisted of fieldstone slabs under the southern corners while the logs of the northern corners rested directly on the ground. The walls were built of puncheons, with the round side facing out, and round peeled logs. The corners were saddle notched and the log butts extended beyond the notching. Board chinking had been shoved between the logs. All walls except the south were intact; it had partially collapsed because the door framing had fallen apart. In addition to this single door, the building had two windows, one in the east and one in the north wall. Neither were fitted for glass panes and probably had been covered by wooden shutters. The gable roof framing was essentially the same as that seen in the barn at 45-OK-308H (Peterson/Colwell/Machessean Homestead). A medial log set across the width of the barn rested on the north and south wall plates and supported two log

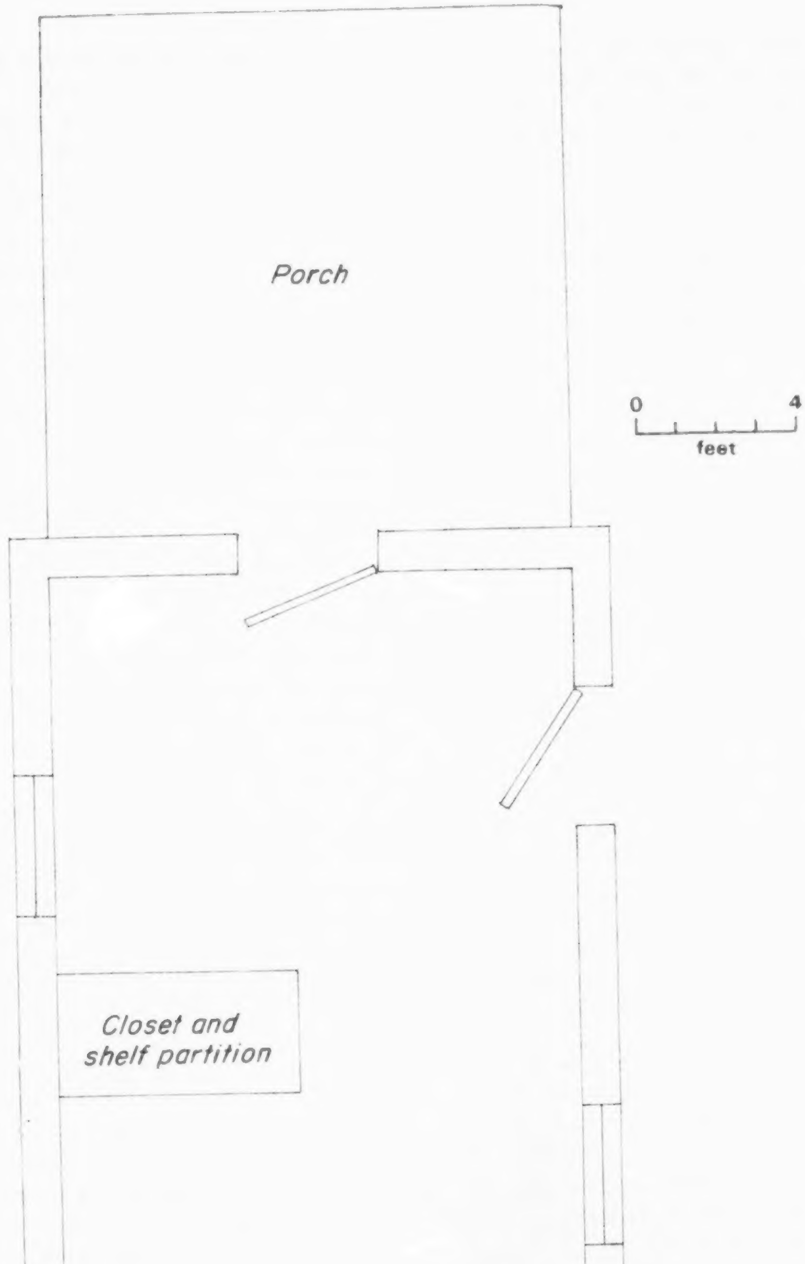

Porch
0
4
feet
Closet and
shelf partition

Figure 6-4. Log house floor plan (Feature 1), Rod Hopkins Homestead (45-DO-245H).

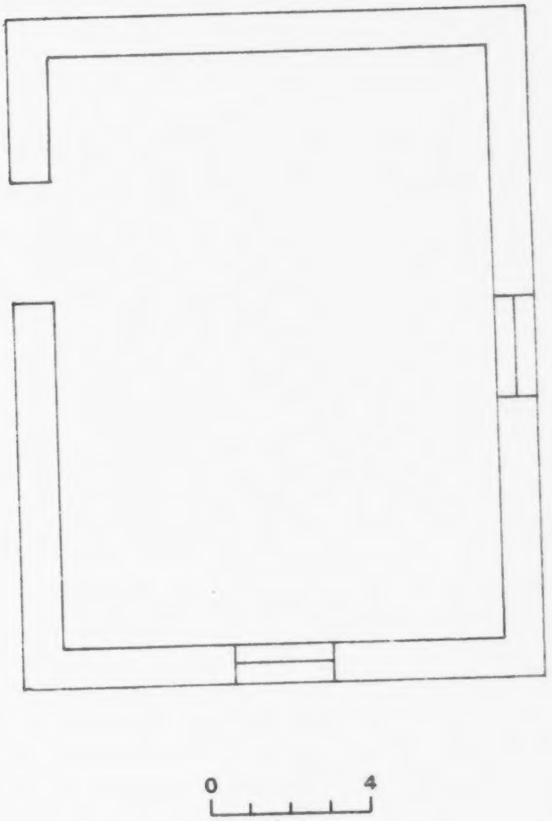


Figure 6-5. Log barn floor plan (Feature 3), Rod Hopkins Homestead (45-DO-245H).

purlines which ran the length of the house. The purlines were fastened in the east and west walls by saddle notching. The medial log also supported a vertical wooden block which in turn elevated and supported the log ridgepole. The roof was constructed of split boards of varying widths which were fastened with round nails to the ridgepole, purlines, and plates. The roofing boards were not weatherproof, so it was assumed they were covered by sod, a supposition supported by the relatively low roof pitch. At the time of the survey, the barn was being used as a rack for irrigation pipe and the roof was covered with used baling wire.

Feature 4 was a horizontal log from which a section--two squares joined by a small channel--had been deliberately cut out. It may have been a deadhead of a foundation of some sort, but a positive identification was not made.

A portion of a dirt road was found but not given a feature number. The road paralleled the ravine and extended in front of the house. Recent cultivation had destroyed much of it. This probably was the same road shown on a 1950 map of the area (U.S.G.S. Alameda Flat Quadrangle, 15' 1956).

Few artifacts associated with the original construction and occupation of the Hopkins Homestead were found. Round common nails were the exception, and appeared to have been used throughout the building. Other objects that may have been associated with original occupation included an ornamental chrome potbelly stove part and purple upholstery material. Hay bales and a feed sack indicated that the house was used as a storage barn after it had been abandoned. Miscellaneous debris included a bird cage, a fireplace screen and screw-top glass jars.

Feature 5 was a rather small refuse dump located along the side of the ravine at the western margin of the site. It was closer to the barn than the dwelling; this proximity was reflected in the kinds of items deposited: iron cable, barbed wire, sheet iron (some of which was galvanized), fine size mesh screen, cast-iron machine parts, a car seat spring, tin cans of various sizes, a stove pipe elbow, an enamelware basin and plate, and recent jars and bottles. With the exception of the jars and bottles, most of these objects were probably associated with the homestead.

Three shade trees (Feature 2) were found between the house and the riverbank. They were old growth and most likely associated with the occupation of the dwelling. Their species was not recorded.

45-DO-252H, 45-DO-253H, AND 45-DO-255H -- VERNILE HOPKINS HOMESTEAD

The above site numbers are all components of a single homestead entry patented on 167.45 acres by Vernile F. Hopkins in 1914 (General Land Office Records, Bureau of Land Management Archives, Portland). The value of his property in 1908 was $200 and included a "house, orchard, fences, and cultivated lands" (General Land Office Field Notes, Appendix A). Vernile Hopkins came to the area about 1885 from California and was reputed to have been the first homesteader in the Alameda Flats area. Rod Hopkins, who homesteaded at site 45-DO-245H, was his son. The elder Hopkins' family was remembered with admiration by local people:

> He [Hopkins] built a log house and developed his land. He had a grape vineyard, fine Bartlett pears, cots with seeds so much like almonds that they were saved to use as nuts, blue Italian prunes, luscious cherries, and probably the best peaches ever raised in Washington. He raised a family of four boys and two girls, Altha and Myrtle. The boys, Rod, Elzy, Clarence, and Babe were great horsemen in early days. ...The first school in this area (Alameda Flats) was held in the Hopkins' home in about 1902 (Bicentennial Association 1976:98).

We do not know when the homestead was abandoned.

The sites are located on the downriver end of China Bar, an area previously described in Chapter 5 (see 45-DO-250H). The homestead was located next to a placer mine channel on portions of the bar not disturbed by mining. Site 45-DO-252H is in Section 34, Township 31 North, Range 29 East on the south bank of the Columbia River, 1,230 ft upstream from RM 576 (Figure 1-1). Sites 45-DO-253H and 45-DO-255H were located in Section 3, Township 30 North, Range 29 East on the south bank of the Columbia River; the former site is about 820 ft upstream and the latter is about 575 ft upstream from RM 576 (Figure 1-1). The sites are at elevations ranging from 950 ft above m.s.l. to 1,000 ft above m.s.l. Much of this area is an alluvial terrace behind which rises a hillside where many of the features were located. The vegetation is mixed; sagebrush and rabbitbrush are the dominant plants, but tumbling mustard (particularly around 45-DO-255H), bitterbrush, cheat grass, pine trees and juniper were also noted.

The features observed at the site (Figure 6-6) correspond reasonably well with the historical descriptions and Bicentennial Association's record of the homestead although our survey team did find features which had not been recorded previously. Table 6-3 lists the features we found and their dimensions.

Table 6-3. Feature types and dimensions at 45-DO-252H, 45-DO-253H and 45-DO-255H.

Feature	Type	Dimensions (ft)
1	Refuse dump	ca.30 × 50
2	Fruit trees	---
3	Retaining wall	4 (max) × 30 × 3.5
4	Dwelling	15 × 20 × 9.5 (min)
5	Fenced enclosure	60 × 62 × 4.5
6	Barn	13 × 17 × 14
7	Root cellar	8 × 17
8	Root cellar	8 × 15

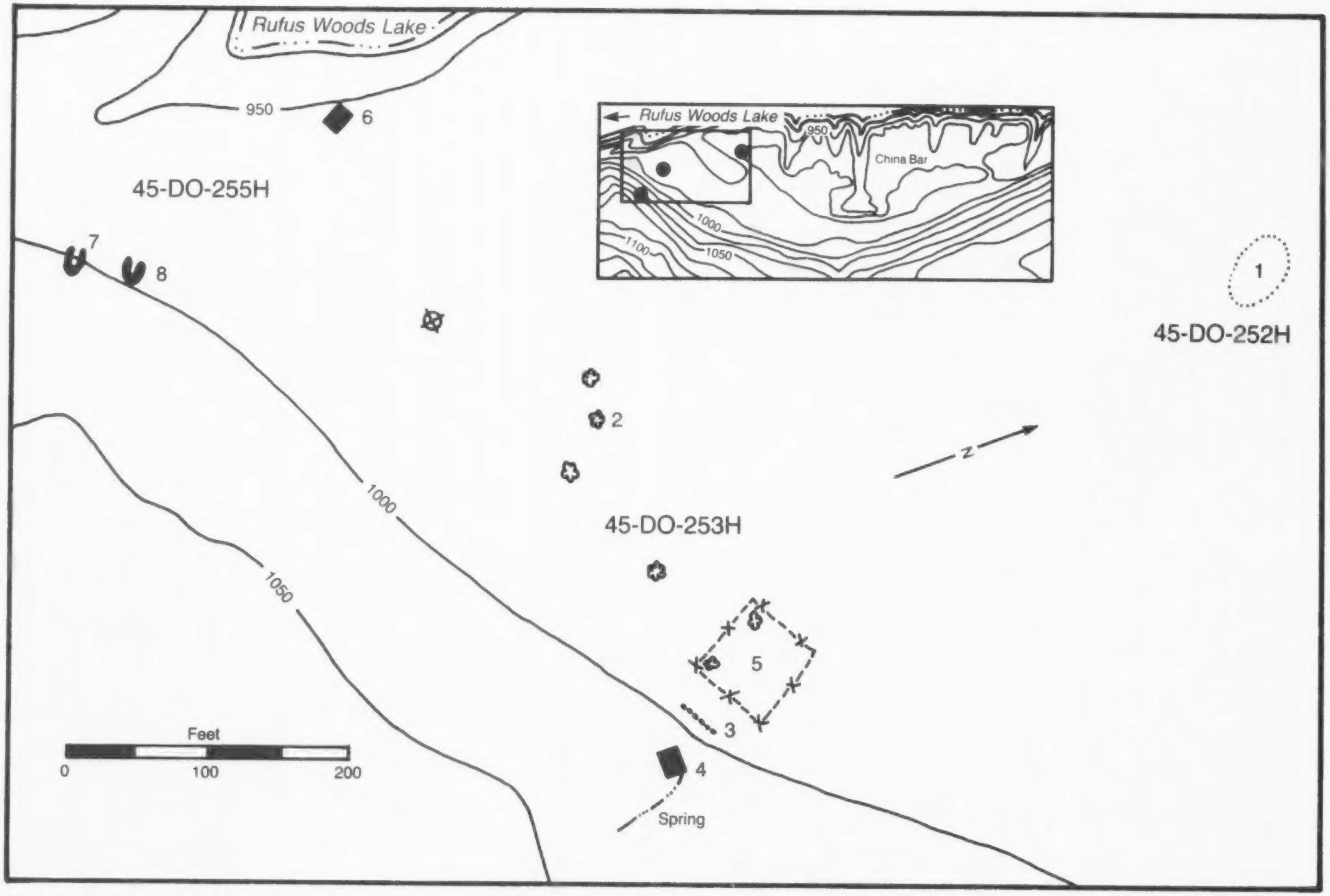

Rufus Woods Lake
950
6
45-DO-255H
7
8
1000
1050
Feet
0
100
200
2
45-DO-253H
5
3
4
Spring
N
1
45-DO-252H
Rufus Woods Lake
950
China Bar
1000
1050
1100

Figure 6-6. Vernile Hopkins Homestead (45-DO-252H, 45-DO-253H and 45-DO-255H) and cultural features identified. For legend, see Appendix B.

The buildings at the site had deteriorated, but were intact enough for surveyors to determine their original function. The dwelling (Feature 4) was a single room, one-story building which probably housed the Hopkins family; it may also have served as the school mentioned in Bicentennial Association's account (Figure 6-7). The partial foundation of stacked flat granite fieldstones extended no more than 3 ft above the ground. There was no indication that there had been a wooden floor in the house so it was presumed to have been dirt. The walls were square hewn logs joined at the corners by square notching. Vertical round wooden dowels driven into each of the corners reinforced this notching. To weatherproof the walls, triangularly split poles were nailec between the logs; the area was then mortared with sandy mud.

The cabin had two doorways and three windows. All apertures were centrally located in the walls except one window on the north wall that was offset west due to the door. The doorways were in the north and south walls and framed with rough sawn boards nailed directly to the interior and exterior wall logs. The doors and most of the door hardware were missing, except for a lock plate on the north door frame. The northern doorway had a fieldstone doorstep. The window framing, like the door framing, was of rough boards, apparently whitewashed on the interior. The rectangular window openings lacked both panes and sashes but commercially made metal curtain rod holders hung at the windows.

The plates were the only wall logs which were left round; these were fastened to the other logs with square shank, diamondhead cast spikes. The entire roof had collapsed and some of it probably had been salvaged because only a few roofing boards were found in the vicinity. Because all four walls were of equal height, it was assumed the dwelling had a gable roof. Vertical boards probably covered the gable ends.

Feature 3 was a small retaining wall found in the front of the dwelling (Feature 4). Presumably, it was constructed to hold back the toe of the terrace on which the dwelling was built. The need for this wall was no doubt increased by a small spring which drained the area east and in front of the house. The wall was a motley affair of tree branches, stumps, driftwood boards, and fieldstones stacked horizontally. This structure had no foundation, appearing to be an impromptu undertaking rather than a planned endeavor.

The second log building at the site (Feature 6) was probably a barn or some other sort of animal shelter (Figure 6-8). This single room, one-story cabin, found at the edge of the present riverbank, was in danger of collapsing. Its weakened foundation consisted only of granite fieldstones placed at the corners. The walls were built of logs left whole and peeled. Some of the logs appeared to be driftwood. The corners were fastened by saddle notching; no attempt had been made to trim the logs to make them flush with the corners. Triangular split wood strips fastened with round nails between the logs served as chinking. The cabin had a single doorway in the center of the south wall. Rough sawn boards nailed directly to the bulk ends of the wall logs provided framing for the doorway. The doorstep was a granite fieldstone. Window openings were located in the centers of the east and west walls. The window framing consisted of vertical boards nailed to the logs and

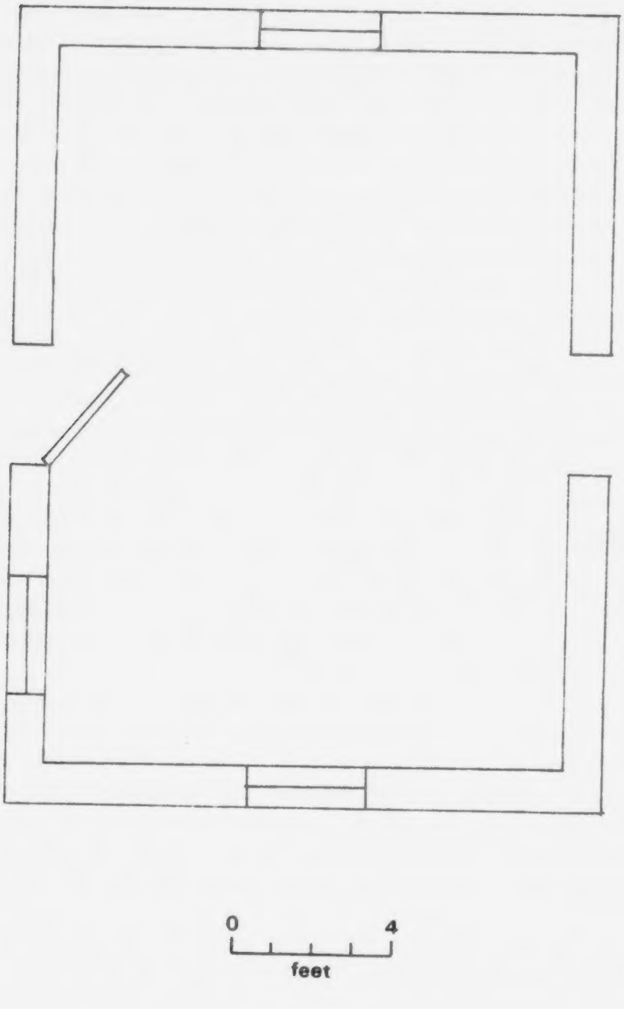


Figure 6-7. Cabin floor plan (Feature 4), Vernile Hopkins Homestead (45-DO-253H).

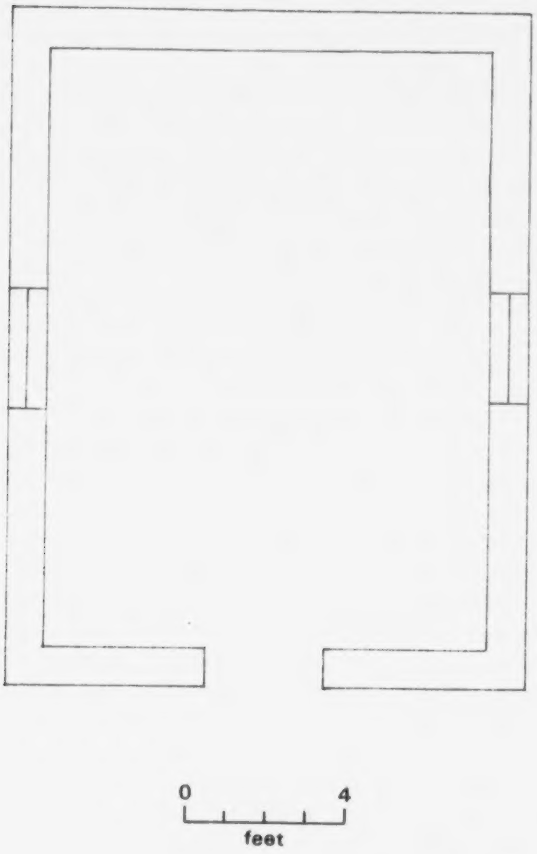


Figure 6-8. Log barn or animal shelter (Feature 6), Vernile Hopkins Homestead (45-DO-255H).

to the notched areas in the top and bottom logs. Wooden shutters probably covered the windows. The gable ends, located on the north and south sides of the building, were covered with a single layer of vertical boards. The rafters were 2 x 4's joined at the pitch of the roof by a miter and gusset plate and covered with 1 x 12-in boards. Wooden shingles were applied over the boards.

The remaining two buildings (Features 7 and 8) were root cellars built primarily of fieldstones. Feature 7, in much better condition than Feature 8, was found at the foot of a hill at the southwest margin of the site. It was dug into the hillside and lined with a front and two side walls. The construction stones were generally rounded, and held in place more by their bulk than by the modest amount of mud mortar. The cellar's single entryway was in the front, or north, wall. There were probably two doors in this entryway, separated by a 6-ft long hallway through the wall, but they were not found. The framing of the doorway consisted of four vertical wood posts which elevated a lintel of 1 x 6-in boards about 5 ft above the ground. Stones placed on top of the lintel heightened the cellar. Although missing, the roof was assumed to have been backfill piled over roofing boards. Evidence of roofing boards included two vertical log posts found on the front corner of the building (presumed to have held wooden plates) and a large board scatter found about 20 ft downslope in front of the cellar.

The second cellar (Feature 8) was found slightly west of the other one. It too had been dug into the hillside and had three stone walls--tabular pieces of granite mortared by mud--built inside the excavation. Although no wood was associated with this cellar, its construction was assumed to be similar to the other. Like Feature 7, it had a single entryway in the north wall and a board scatter on the slope in front. The board scatters in front of both cellars suggested that lumber was being salvaged or that the buildings had been vandalized.

Feature 5 was a square, partially collapsed fenced enclosure built of wooden fence posts with attached barbed and sheep wire. No gate was found. The enclosure may have been either a garden area or an animal pen.

Feature 1, the refuse dump associated with the homestead, was found among the placer mine excavations near the riverbank. The majority of the objects scattered on the surface had domestic functions and probably were associated with the dwelling. There were no indications that these items were associated with the placer mine. The contents of the feature are listed below.

> Domestic Objects: iron skillet, enamelware bowl, lantern parts, cast-iron stove parts, sheet metal stove parts, tin cans of several sizes, zinc canning jar lids, stoneware crockery, earthenware utensil fragments.
>
> Agricultural/Industrial: iron shovel blade, barrel strap.

Approximately 30 fruit trees were growing between the dwelling and the barn. Another group of four trees was found to the northeast of the dwelling. Presumably these were remnants of the orchard planted by Hopkins. A few peach trees were identified from pits found on the ground. Most of the trees, however, could not be identified. The historical account quoted above suggests there were several other kinds of trees in the orchard.

45-DO-261H — HAMMER HOMESTEAD

This site is on property taken on a homestead entry patent by Samuel N. Hammer in 1913. The homestead included 145.85 acres, most of which were in lots along the river in Section 8, Township 30 North, Range 29 East (General Land Office Records, Bureau of Land Management Archives, Portland). Mr. Hammer had occupied the property since 1908 in order to qualify for the patent, but he must have settled after this section was subdivided in that same year, since his homestead was not recorded in the 1908 survey (General Land Office Field Notes, Appendix A). A 1915 map of the area illustrated a building and road in Lot 2 of the homestead (Douglas County Directory 1915:71). The building was assumed to be the same as Feature 3 recorded in the historical survey. Little was recorded about Mr. Hammer except for one reference to him as the "first county road man" (Bicentennial Association 1976:64).

The site is along the 1,000 ft above m.s.l. contour on a gentle sloping terrace on the south bank of the Columbia River, 655 ft downstream from RM 574 (Figure 1-1). This is the second minor terrace above the river. A building found in one of the placer mine excavations to the north suggested the site originally extended even closer to the riverbank. The dominant vegetation is sagebrush, rabbitbrush, and cheat grass; some Russian thistle, and a single birch tree also were growing on the site at the time of our investigation. Most of this vegetation is relatively new growth that took root after a grass fire swept the terrace (Fred and Harold Weber, personal communication 1977).

The features found at this homestead were generally in a very poor state of preservation and only three of them were found (Figure 6-9). The grass fire may account for some of the deterioration, or, they may simply reflect the long period of abandonment. The features are described below.

Feature 1, measuring 13 x 13 ft, was the poorly preserved remnant of a root cellar found in a placer mining excavation. Presumably, this spot was chosen to take advantage of the placer excavation in building the cellar. All that remained was a U-shaped depression with some stacked stones along the front wall. No structural timbers were evident.

Feature 3, measuring 21 x 26 x 1.5 ft, was interpreted as the foundation of the cabin shown on the 1915 map of the area. It was constructed of unmortared granite and basalt fieldstones. Although its perimeter was intact, there were no indications of interior footings or sills. A few very decayed boards found inside the foundation were identified as the only probable remains of the dwelling superstructure.

Feature 2, 153 ft long and 3.5 ft high, was a retaining wall that reinforced the toe of the terrace on which the dwelling was located. Constructed of granite and basalt fieldstones laid against the toe of the terrace bank, it was well preserved and largely intact. A 3-ft wide gap in the wall was identified as the location of a stairway leading from the lower

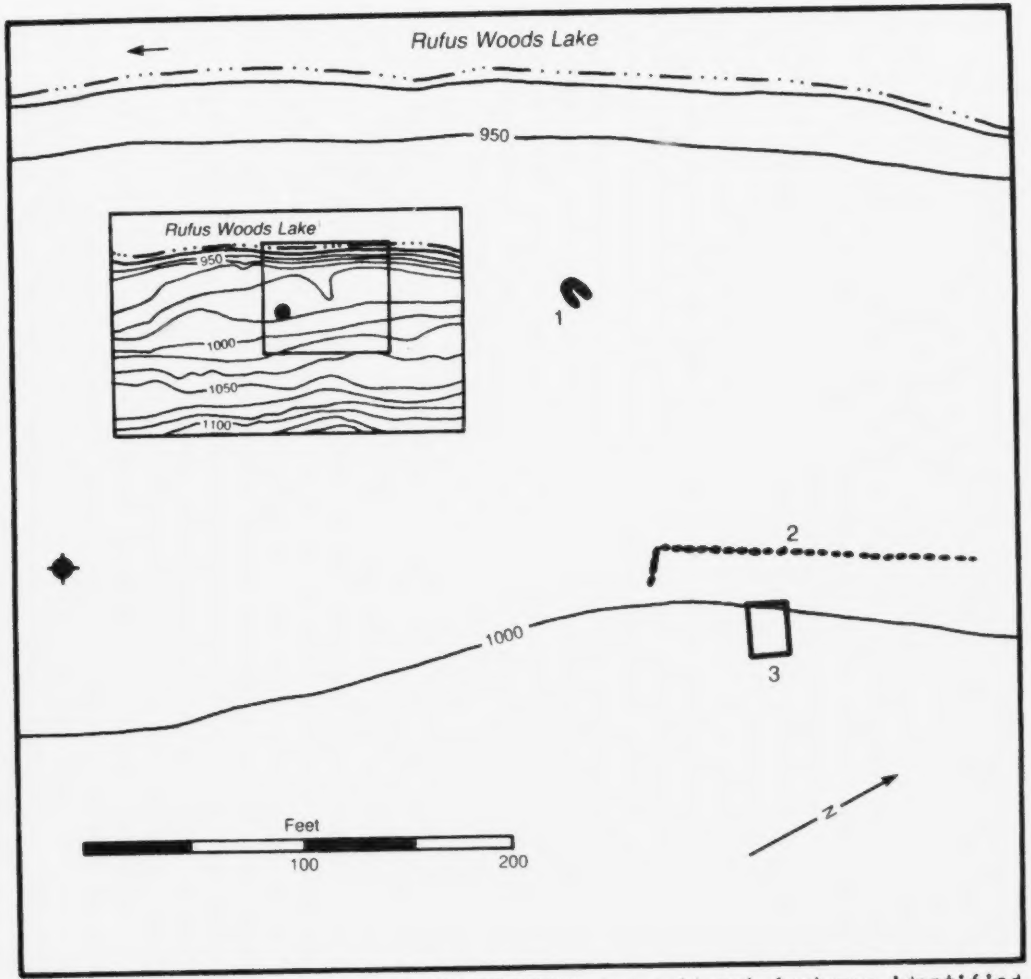

Rufus Woods Lake
950
Rufus Woods Lake
950
1000
1050
1100
1
2
3
1000
Feet
100
200
N

Figure 6-9. Hammer Homestead (45-DO-261H) and cultural features Identified. For legend, see Appendix B.

terrace to the house terrace. All that remained of these wooden stairs was a piece of lumber found in the gap.

45-OK-180H — PRATHER HOMESTEAD

The property on which this site is located was used in the 1880s and 1890s as a landing for the Condon Ferry which funneled traffic to the Okanogan gold mines (see Chapter 7). No record indicates that the owner of the ferry, Samuel Wilber Condit, owned the property; he probably just held squatter's rights. The first owner was George Prather who took out a homestead entry patent on Lots 4, 5, and 6 of Section 9, Township 30 North, Range 28 East in 1936 (General Land Office Records, Bureau of Land Management Archives, Portland). Prather probably had been there earlier since he assisted in the ferry operation and was brother-in-law to Frank Cotter, the ferryman in the 1920s (Ruby and Brown 1974:135). We do not know whether Prather occupied the site prior to the 1920s.

The site is divided into two functional components: structures associated with Condon Ferry and structures associated with the Prather homestead. The homestead was located on a slope on the north bank of the Columbia River, 245 ft downstream from RM 568, (Figure 1-1) at an elevation of between 960 and 1,000 ft above m.s.l. It was separated from the ferry structures by a fence. Vegetation was predominately salt grass, characteristic of alkali soils. Some sagebrush grew along the river and stream banks. Figure 6-10 shows the location of the cultural features identified at the Prather homestead and Table 6-4 labels them by type.

The buildings at the site were in very poor condition. The principal informants for this site could not remember where Prather's house stood, but tentatively identified the barn location (Features 13 and 18). They described the buildings as "cattle sheds or stock sheds" built of poles with pole and straw roofs (Fred and Harold Weber, personal communication 1977).

One of two principal features (Features 2 and 22) may be remnants of Prather's house: both were found in the vicinity of a root cellar and close to a water supply. Feature 22 was a rectangular excavation into a slight slope, presumably made to level the area for building. Other terraces, sometimes with retaining walls, were found at other sites. However, because there were no masonry objects or lumber near it, the terrace could not be identified conclusively as a building site. A foundation (Feature 2) and associated building remnants (Features 4, 5 and 6) marked a more likely house location. The foundation, built of round cobbles, outlined the perimeter and a medial girder of the building. The stones were unmortared and partially buried. The maximum area enclosed by the foundation was 96 sq ft, a small area for a dwelling. Features 4, 5 and 6 were board piles made up of 2 x 4 and 1 x 2-in pieces of lumber, some timbers, and wire nail fasteners. A two-strand barbed wire fence encircled these features. The artifacts associated with the building--both domestic and agricultural objects--did not provide conclusive clues to the building's function.

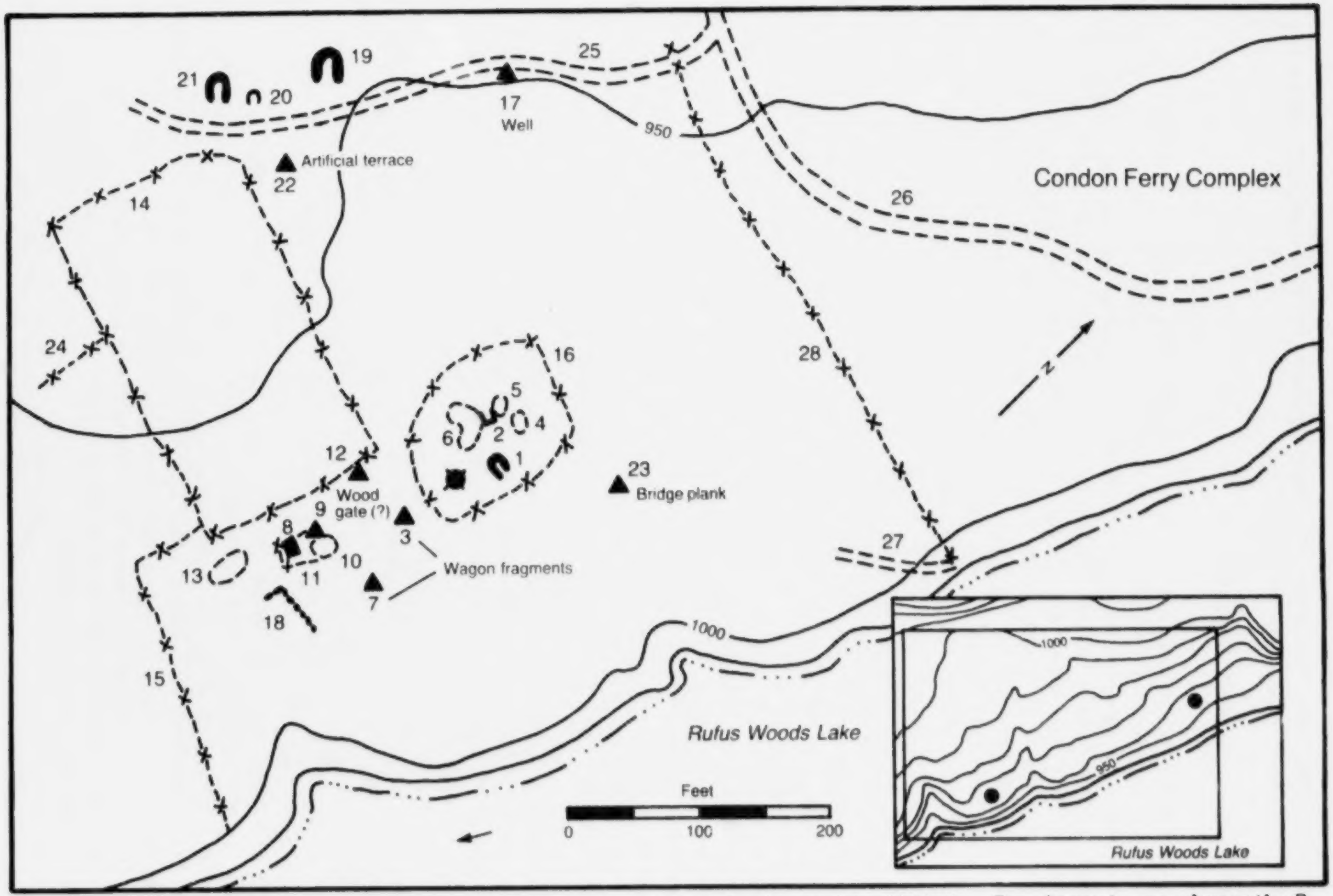

Condon Ferry Complex
Rufus Woods Lake
N
950
1000
Feet
0
100
200
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28
Well
Artificial terrace
Wood gate (?)
Wagon fragments
Bridge plank
Rufus Woods Lake
1000
950

Figure 6-10. Prather Homestead (45-DO-180H) and cultural features identified. For legend, see Appendix B.

Table 6-4. Feature type and dimensions at 45-OK-180H.

Feature	Type	Dimensions (ft)
1	Root cellar	19 x 23
2	Stone foundation	8 x 12
3	Wagon fragments	
4	Board scatter	8 x 12
5	Board scatter	8 x 12
6	Board scatter	27 x 33
7	Wagon fragments	
8	Shed	10.5 x 13
9	Wood gate (?)	2.65 x 8
10	Board scatter	16 x 16
11	Fenced enclosure	18 x 27
12	Box	4 x 4.4
13	Board scatter	12 x 22
14	Fenced enclosure	150 x 270
15	Fence	
16	Fenced enclosure	150 dia. max.
17	Well	7 x 9
18	Retaining wall	15 x 40
19	Root cellar	20 x 22
20	Root cellar	10 x 10
21	Root cellar	18 x 20
22	Artificial terrace	15 x 25
23	Bridge plank	.3 x 15
24	Fence	
25	Road	
26	Road	
27	Road	
28	Fence	

Features 13 and 18 were found near a shallow ravine which intermittently drained the western margins of the site, an area identified as the barn location (Fred and Harold Weber, personal communication 1977). Feature 13 was a very poorly preserved pile of boards ranging from 12 ft long 2 x 4's to round poles. Common round nails were noted in some of the boards. Feature 18, which consisted of stones concentrated along the eastern rim of the ravine, was in no better condition. Some stones had fallen, or had been pushed, into the ravine. Both features were identified tentatively as remnants of the barn.

The site had four root cellars, a surprising number since most homesteads had but one. This may be explained by the Webers' comment that Prather was a truck gardener and sold produce to travelers at Condon Ferry. Three of the cellars (Features 19, 20, and 21) were built into the hillside along the northern site boundary. All that remained were the excavations and banked walls of dirt and stone. Each cellar had a single entryway which faced south toward the main portion of the site. Another cellar (Feature 1) was found in the approximate center of the site within a fenced enclosure. Like the others, it was in poor condition; all that remained was the earthenwork insulation and a single log from the framing or walls.

Feature 8, located within the boundaries of a fenced enclosure (Feature 11), was tentatively identified as a shed. A heavily constructed shed roof of round crossed logs covered with board sheeting was all that remained. A board scatter (Feature 10) may have been the collapsed walls of this shed. The boards were 1 x 5's, 1 x 6's and 1 x 7's, sizes commonly used as wall boards.

A fence (Feature 11) and an unidentified wooden structure (Feature 9) enclosed Features 8 and 10. The fence was a combination of two wood corner posts, wooden rails, and hog wire. The rails were secured to the fence posts with barbed wire and fastened again with round nails. The rails may have been used as a platform for fastening the hog wire or as a barricade to prevent animals from burrowing in or out of the enclosure. The fence was too poorly preserved to determine which use is more likely. Feature 9 overlay the eastern side of the fence. It was constructed of 1 x 6-in boards braced on one side with five perpendicular boards. Although it seemed too heavy for a gate and no hinges were located, it may have served as a "patchwork" section of the fence and gate.

Surrounding almost an acre of ground, Feature 14 was the largest fenced enclosure at the site. Because no structures were found inside the fence, it was believed to have enclosed a truck garden. The fence was constructed with wooden fence posts, hog wire, and barbed wire. The fence posts were set at random intervals and sometimes were reinforced with stones and knee braces. The original fence was not very high, judging from the hog wire, which was only 2 ft high with two strands of barbed wire fastened above it.

Three other fence lines were found, two of barbed wire and one of sheep wire. Feature 15, one of the barbed wire fences, defined the site's western edge. It ran from the riverbank north and turned a right angle to connect with Feature 14. Another fence, Feature 28, defined the eastern boundary of the homestead. It too was constructed of barbed wire and wooden fence posts. The wire had been repaired repeatedly. Feature 24, the sheep wire fence, ran west from the fenced enclosure (Feature 14) to disappear into the ravine. Because of its orientation and abrupt ending, no function could be ascribed to it.

Feature 17 was a structure for supplying water to the site. It consisted of a very shallow, circular rock-lined well with board cribbing and cover. It had been dug into the streambed on the eastern edge of the site. This stream drains Alkali Lake, located about one mile to the north. The ravine through which the stream runs is between the Prather Homestead and the Condon Ferry complex. Feature 23, a plank laid across the ravine, linked the two sites.

Two roads were found at the homestead. A dirt road (Feature 25) ran east-west on the northern part of the site and in front of the root cellars. This road was connected to the Condon Ferry road and ultimately to the town of

Okanogan. The second road (Feature 27) began at the riverbank and ended before it reached the western streambed. The Webers suggested that this road was an alternative ferry landing or a ramp for unloading boards from lumber rafts. Apparently, lumber rafts were a common means of transporting lumber from the saw mills to the homesteaders along the river (Fred and Harold Weber, personal communication 1977).

Feature 12 was a homemade box, perhaps serving as a feed trough. We judge that it was set in its present location after the site was abandoned since it was found overlying a section of the Feature 14 fencing.

Two wagons were found. Feature 3 had all four wheels and its body frame intact. All that remained of the second wagon (Feature 7) was a wheel and axle, and a wide scatter of wagon hardware. Both wagons appeared to have been stripped for parts. There were no manufacturer's marks recorded for either wagon.

45-OK-182H — BLACKBURN HOMESTEAD

The buildings at this site were reputed to be "dugouts," the dwellings of Chinese miners who were reported to have lived there about 1900 (Lyman 1976:25 and Munsell and Salo 1977). Employees of the Colville Tribal Ranch substantiated this during the 1977 historic survey. However, Fred Weber contradicted this (personal communication 1983). He believes the buildings were those of a Euroamerican homestead inhabited by the Blackburn family. Although Fred Weber had little contact with the Blackburns, his grandparents lived across the river from them for a short time. Land records do not clear up the confusion, nor do the property records. The Okanogan County Assessor's Office 1907 plat map shows the site as the homestead of R.E. Blackburn, but no patent was issued. However, General Land Office surveyors, who subdivided the property in 1907, made no mention of a Blackburn homestead (see Appendix A). The site itself is located in Section 9, Township 30 North, Range 28 East.

The site is along the north bank of the Columbia River overlooking a small bay formed by the 1953 reservoir pool rise (Figure 6-11). It is 2,130 ft upstream from RM 568 (Figure 1-1) between 950 and 970 ft above m.s.l. on a low alluvial fan formed by a perennial spring and bounded by hills and granite outcrops. Tall grasses and deciduous trees covered the site at the time of our investigation, preventing it from being thoroughly inspected. The only features we located were the two probable dwellings known as "dugouts." They were designated Features 1 and 2.

A single room building with a dirt floor, Feature 1 measured 14 x 25 x 4.5 ft. It was built adjacent to a large granite outcrop, which provided its west wall. The north and south walls were intact, but the front (east) wall was either missing or never built. The walls were constructed of unmortared angular granite fieldstones and were about 2.5 ft thick and 6 ft long. A slight northern projection from the northeast corner may have been part of another room. No part of a roof remained.

The other building at the site, Feature 2, measured 12 x 18 x 5.5 ft and was also adjacent to the granite outcrop and constructed in a manner similar to the first. The intact front (east) wall contained what appeared to be a

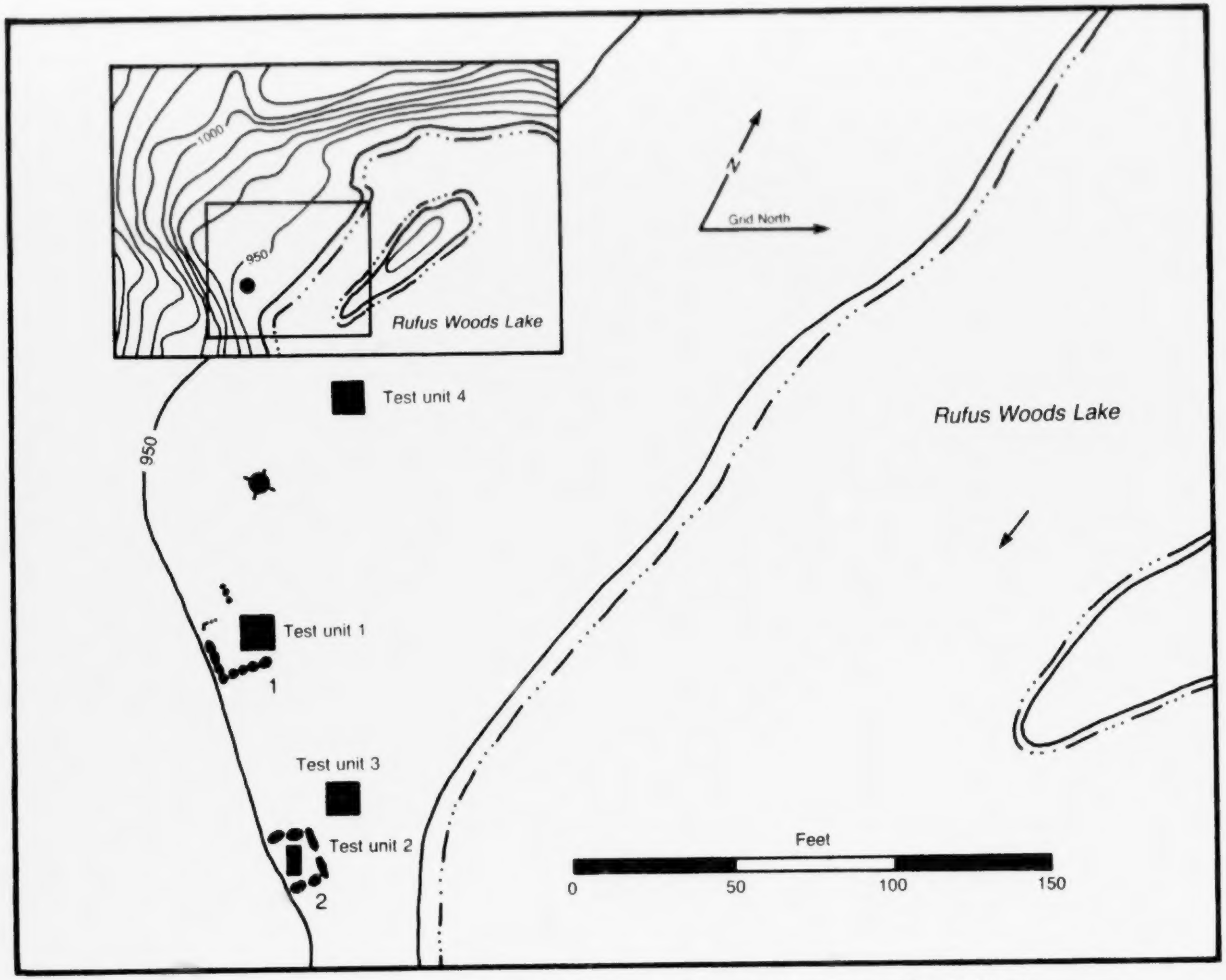

1000
950
Rufus Woods Lake
N
Grid North
Test unit 4
950
Rufus Woods Lake
Test unit 1
1
Test unit 3
Test unit 2
2
Feet
0
50
100
150

Figure 6-11. Blackburn Homestead (45-OK-182H), cultural features identified, and excavation units.

single doorway although no door frame or door was preserved. The east, north and south walls measured about 3 ft high and 9 ft long. A board found on the wall in the southwest corner was believed to be a roofing board although no other signs of a roof were noted.

The historic survey crew recorded very few objects; those noted most frequently were driftwood boards. They also found two iron pails and an enamelware pot. Neither revealed the site's ethnic associations.

Both the controversy surrounding the ethnic identity of the dugout's occupants and the possibility that the site was one of the few in the project area associated with Chinese miners led to the excavation of four test units (Figure 6-11). Two were located within the two low stone wall structures (Features 1 and 2). Another was placed outside the doorway of the Feature 2 dugout and the last was placed 35 m north of the same structure.

Excavators identified three features at the level of a probable occupation surface. A posthole (Feature 6), identified in Feature 1, indicates the structure was roofed. Although the year of the dugout's construction could not be determined, artifacts recovered from the occupation surface suggest it was at least used as a storage shed after 1900. A second feature associated with Feature 1 was a rectangular pit of unknown function (Feature 5) but probably made after the dugout was abandoned. The third feature (Feature 7), located in Feature 2, was a concentration of complete bottles and canning jars, wooden shelves and a few miscellaneous artifacts. The artifacts and shelving suggest it was used as a root cellar, probably between 1910-1940.

Our investigation, then, does not support the conjecture that 45-OK-182H was once a Chinese miners' camp. Rather, the dugout shelters were probably used initially as outbuildings for a homestead after about 1910, and probably as a stopping place or shelter for passersby or sheepherders after about 1925. A more detailed description of the test unit finds follows.

FEATURE 1

One 2 x 2-m unit (Test Unit 1) was located within the Feature 1 structure. Under the sod layer, composed of a thick grass and sheep manure, is a dark organic soil reaching to a depth of 10 cm. From this stratum, a very small amount of cultural debris was recovered, including the surface recovery of a cast-iron burner ring from a gas stove. The next stratum was a yellow oxidized fine sand a few centimeters thick overlying a very dark organic soil.

The bulk of cultural material was encountered between the fine sand and lower organic soil strata, which occurred between 30-40 cm below the surface. Also identified at this level were two features, a posthole and a rectangular pit. This probable occupation surface included a small variety of artifacts with little chronological significance. Metal artifacts consisted of numerous fragments of a metal pot or basin, wire nails, tin can fragments, a safety pin, two wrought iron staples, one wire staple, picture wire, an axe blade and an overalls clasp. One earthenware fragment, and fragments of the base of a clear Kerr canning jar (ca. 1909-1946) were also found on the living surface.

A ring of three large rocks, encountered at the level of the occupation surface, proved to be the footing for a post or ridgepole probably supporting roof beams over the Feature 1 structure. It was located in the northern part of the test unit, overlapping the boundaries between the northeast and northwest quads. The post measured 7 cm in diameter and was found a few centimeters below the large rocks. It extended to the bottom of a pit that ended at 80 cm below the surface. The pit, or posthole (Feature 6), contained a number of large rocks snugly bracing the post and a minimum of dark brown fill. Measuring 45 cm in diameter at the top, the posthole tapered to 25 cm in diameter at its base. No cultural debris was identified within the posthole fill.

A rectangular pit of unknown origin and function, was identified in the southwest quad (Feature 5). Its top, level with the occupation surface and the post hole, contained three layers of fill. The pit measured 70 x 15 cm and roughly held those rectangular dimensions until it ended at a depth of 25 cm. The upper 15 cm, consisting of a yellow soil matrix, stopped abruptly at an ashy dark soil mixed with the yellow soil and containing charcoal fragments. Beneath this an ash layer, 2-5 cm thick, lined the bottom of the pit. Eggshell was mixed with the ash. A few fragments of metal scrap and a 1918 penny make up the artifact assemblage recovered from the ash layer.

Data recovered from Test Unit 1, within the confines of the Feature 1 structure, suggest that the structure was roofed over after about 1900 and used for unknown purposes. If it was ever used as a dwelling, the occupation was brief and little was left behind. The small artifact assemblage suggests the structure may have been used as a storage shed or similar homestead outbuilding. The rectangular pit described above was probably used for cooking. However, it is unclear whether it was used by an inhabitant of the Feature 1 structure (if there was one) or by casual visitors to the site after its abandonment by the Blackburns.

FEATURE 2

To investigate the Feature 2 surface structure, one 1 x 2-m unit (Test Unit 2) was excavated within the walls of the structure. The upper 10-15 cm consisted of a darkly stained, very organic sandy silt with a small amount of gravel and flecks of charcoal that peeled away in tabular form. Given its consistency, we suspect pack rats or some other small animal lived in this stratum. A few glass fragments were the only cultural materials identified.

The next stratum consisted of a less stained, compact dark sandy silt that continued from 15-40 cm below the surface. Excavators recovered the shattered fragments of an aqua BALL canning jar (ca. 1930-40) and a zinc canning lid from the top 15 cm. They recovered most of the artifacts from 30-40 cm below the surface; these probably represent an occupation surface of the structure although no floor was seen. The unit ended at 40 cm in a sterile, rocky soil.

The occupation surface designated throughout Test Unit 2 was littered with several complete bottles and canning jars, bottle glass fragments and large bird bones. Table 6-5 lists the artifacts found there. Beneath this debris, excavators recovered two wooden planks with sawed edges and several wood fragments. Under the wooden planks was a shattered green canning jar. Because most of the bottles and canning jars were intact, we suspect the wooden planks were shelves for these items, rather than collapsed roof beams. The canning jars suggest the structure was used as a root cellar or storage area, while the extract and soda/juice bottles suggest idle or casual use of the structure as a temporary shelter. If the structure was a root cellar, the granite walls would have served as an interior structure, with soil banked against them to keep light out. If it was a root cellar, it is something of an anomaly in the area. According to Fred Weber (personal communication 1983), "dugouts" such as these were built as dwellings and/or storage sheds. Root cellars were more often lined with logs and constructed differently. Although we have no information about when the feature was constructed, the artifacts indicate two occupations. Between ca. 1910 and 1920 it was a root cellar as the patent medicine bottle, the extract bottle and the clear canning jars suggest. Since 1930 and perhaps mainly between 1930 and 1940, it served as temporary shelter, as the soda bottles suggest.

Table 6-5. Artifact inventory from root cellar floor, Feature 2 structure, 45-OK-182H.

Artifact	Date Range	Minimum # of vessels/items represented
Bracket/hook		1
Tin can-resealable		3
Window glass		1
Soda/juice bottle, clear	1904 - ?	1
Soda/juice bottle, clear	1930-32	1
Extract bottle, clear	1904-1923	2
Patent medicine bottle, clear	1917	1
Canning jar, aqua	1930-40	1
Canning jar, clear	1909-1912	1
Canning jar, clear	1915-1946	1
Zinc canning lid		1
Wire nail		1

TEST UNITS OUTSIDE STRUCTURES

One 2 x 2-m unit (Test Unit 3) was located outside the opening to the Feature 2 structure in the path of a cattle trail. A stratigraphic sequence similar to that of Test Unit 1 was noted. The very dark, stained organic layer gave way to the yellow silty sand at about 12 cm below the surface. This stratum contained only two fragments of a porcelain canning jar liner and some metal scrap. Excavation was halted at the dark organic layer, about 20 cm below the surface. A few porcelain canning jar fragments, clear glass and cryptocrystalline flakes were found.

One 2 x 2-m unit (Test Unit 4) was located about 35 m north of the Feature 1 structure in a square patch of nettles scattered with glass fragments. Although held to be a likely place for a domestic structure, no evidence of a building was found.

The unit, excavated to 30 cm, was characterized by charcoal staining and burned wood fragments in the north quad. A few artifacts, mainly scrap metal and a few nails, were recovered. We now suspect that the patch of nettles may once have been cultivated.

Excavators recovered 1,054 artifacts from the four data recovery units. After being identified, these artifacts were classified according to the general functional activities they represented, i.e., domestic, building, and agricultural. Table 6-6 shows the descriptive artifact types and their presumed functional categories.

The artifact collection from 45-OK-182H is dominated by a high percentage (94%) of domestic artifacts, which includes household, personal and food related items. No artifacts were identified that could be exclusively associated with mining or with a particular ethnic group. The identifiable artifacts are described below.

BOTTLE AND VESSEL GLASS

Four complete or nearly complete bottles and 598 fragments of clear, aqua and amber bottle glass were collected during testing at 45-OK-182H. Most of the fragments are from canning jars and drug or extract bottles; most were located on the floor of the root cellar of Feature 2, and in the fill of the same structure. A few fragments were recovered from Test Unit 4. It is possible that the extracts were being consumed as alcoholic drinks rather than used in cooking. The canning jars suggest that the Feature 2 structure was at one time a root cellar. A detailed inventory of the diagnostic bottles and bottle fragments follows.

Soft Drink Bottles

Two types of soft drink bottles were found. This first is represented by one clear, automatic machine-made soft drink or juice bottle (Figure 6-12;a). The round-bodied bottle has a crown lip, a post bottom base and an irregular suction cutoff scar spread above its heel. The basemark consists of "I.P.C. 3.5," designating the manufacturer as the Illinois Pacific Coast Company of San Francisco, California, ca. 1930-32 (Toulouse 1971:269). The bottle was recovered from the floor of the root cellar. The second type is a clear, nearly complete, machine-made soft drink or juice bottle (Figure 6-12;b). Identical to the bottle above in size, this specimen has a cup bottom base and a basemark of "F" in vague concentric circles, and a crown lip. This bottle was also recovered from the floor of the root cellar.

2

Table 6-6. Descriptive artifact types from 45-OK-182H assigned to functional categories.

Functional Category	Artifact Type	Number
Domestic Activities		
	Stove parts	2
	Scrap	25
	Tin can fragments	350
	Bottle glass fragments	598
	Ceramic vessel fragments	7
	Safety pin	1
	Picture wire	2
	Overalls clasp	1
	Coin	1
	Drawer handle	1
	Shotgun wad	1
	Spring	2
	Total	991
Agricultural Activities		
	Bucket	1
	Barbed wire	1
	Harness ring	1
	Axe blade	1
	Chain links	2
	Wire	3
	Leather strap fragment	1
	Total	10
Building Activities		
	Window glass	2
	Wire nails	28
	Square nails	3
	Tack	1
	Iron staples	2
	Wire	3
	Iron nut	1
	Sheet metal fragments	4
	Wood plank fragments	7
	Bracket/hook	1
	Pipe with fitting	1
	Total	53

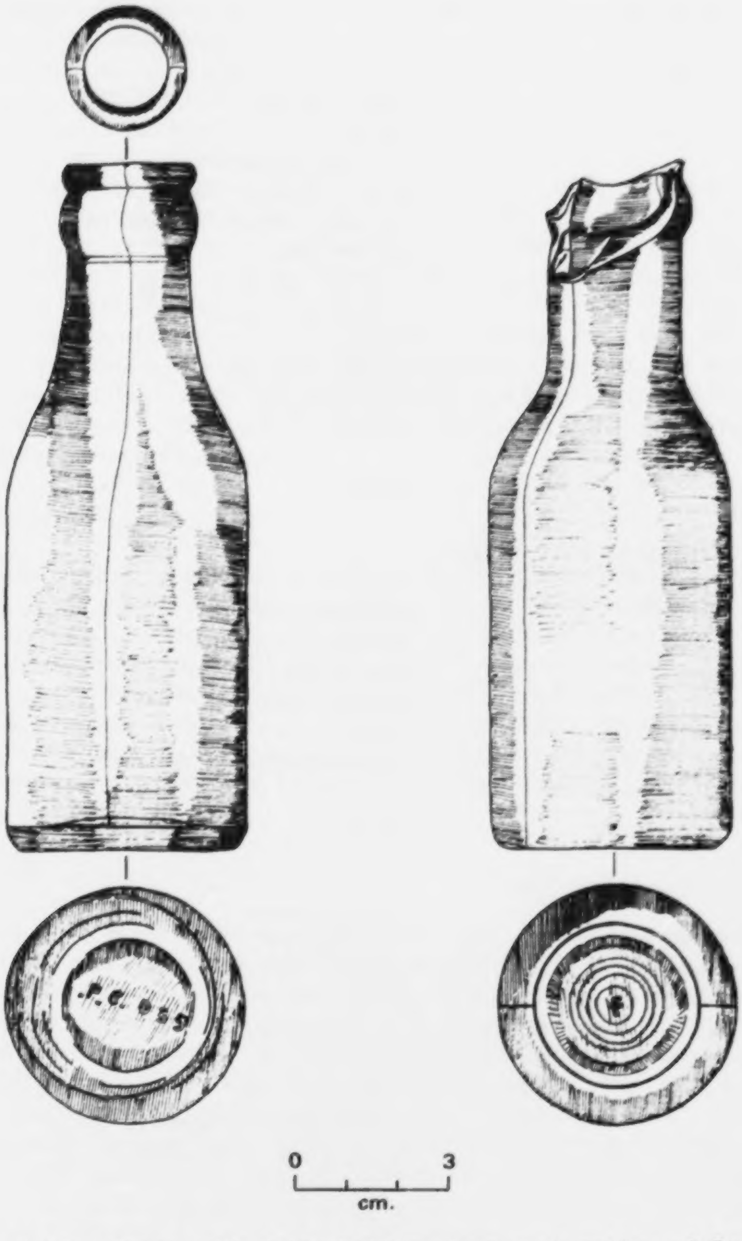


Figure 6-12. Clear soft drink bottles from root cellar of Feature 2, Blackburn Homestead (45-DO-182H).

Medicine and Cosmetic Bottles

Three types of medicine and cosmetic bottles were recovered. The first is represented by a complete, round-bodied, clear bottle with a post bottom base (Figure 6-13). It was made by a semi-automatic bottle machine and has a tooled double ring lip and rounded collar neck finish. The raised lettering, "MEXICAN MUSTANG LINIMENT LYON MFG. CO BROOKLYN N.Y.," circles the bottle. A popular pain reliever, Mexican Mustang Liniment was advertised for "...barbed wire cuts, scratches, galls, stiff joints, growths," etc. including "...rheumatism, sprains, lame back,..." (Barthalomew 1970:54). Our bottle, the 1918 version of the Mexican Mustang Liniment bottle (Devner 1968:64), was recovered from the floor of the root cellar in Feature 2.

A second type is represented by one clear, complete rectangular, machine-made bottle and one clear bottle neck (Figure 6-14). The rounded collar neck has a tooled double ring lip and the single sunken panel bears the raised letters, "WATKINS." The basemark says "US" within a diamond; the spread suction cutoff scar is irregular. Watkins Medical Company made vegetable liniment, dandruff remover and scalp tonic (Devner 1968:99) in addition to extracts (Adams et al. 1975:54). The Company used a cork lip until 1923 (Adams et al. 1975:122), placing our specimen from between 1904 and 1923. The bottle was recovered from the floor of the root cellar.

A third type of medicine or cosmetic bottle is represented by a clear rectangular base fragment (Figure 6-15;a). This machine-made bottle fragment has a basemark of "7." Although the contents are unknown, the shape suggests a drug or extract. It was also recovered from the floor of the root cellar.

One clear, tooled neck fragment with a rounded collar and a ring at the base of the cylindrical neck is typical of a patent medicine bottle (Figure 6-15;b). It was also found in the root cellar floor.

Canning Jars

One hundred and sixty seven aqua fragments of a half-gallon machine-made BALL jar were found on the root cellar floor. The neck is threaded for a zinc cap and the basemark includes a valve mark. On the shoulder are the raised letters "BALL" and "SPECIAL."

Miscellaneous Vessel Glass

Four canning jar bases (Figure 6-16) were also recovered. These were made by an automatic bottle machine in a cup bottom mold by Kerr Glass Manufacturing Company. One fragment bears the raised letters, "Kerr Gla... Chicag.......," This mark was used by Kerr between 1909-1912 (Toulouse 1971:306). Two nearly complete bases represent the company's move to Sand Springs, Oklahoma in 1912, where the company remained until 1946 (Toulouse 1971:306). The raised letters include "KERR GLASS MFG. CO. SAND SPRINGS OKLA, PAT Aug 3 1915." The other fragment bears only the raised letters "GLASS." The first base fragment was recovered from the fill of the root cellar, the second two from the root cellar floor and the third was recovered

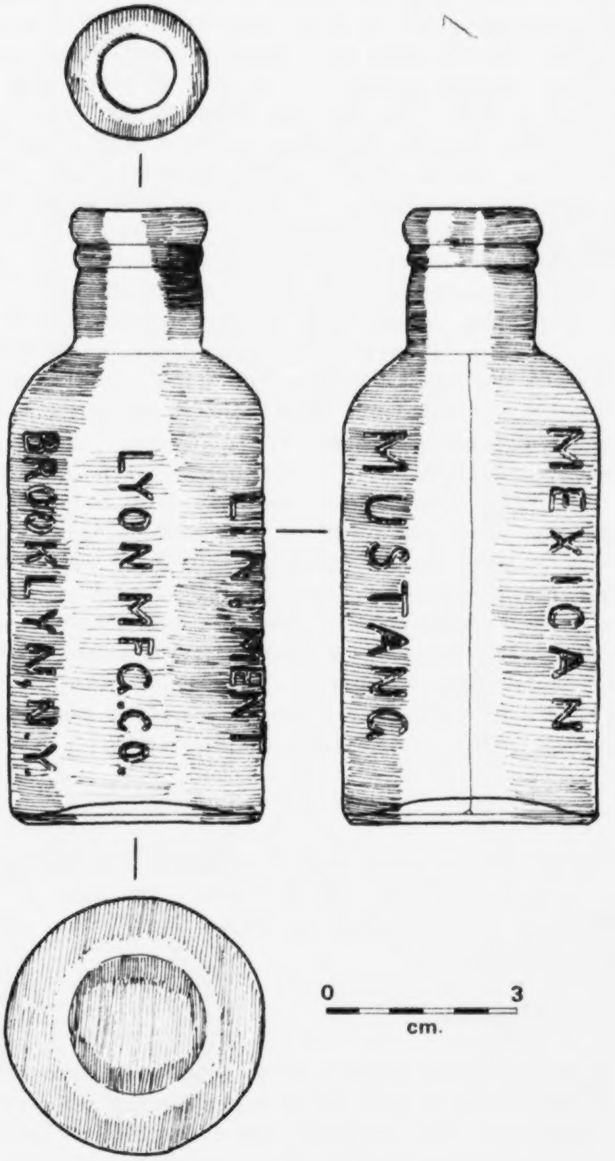

LINIMENT
LYON MFG.CO.
BROOKLYN,N.Y.
MEXICAN
MUSTANG
0
3
cm.

Figure 6-13. Round, clear medicine bottle from root cellar of Feature 2, Blackburn Homestead (45-DO-182H).

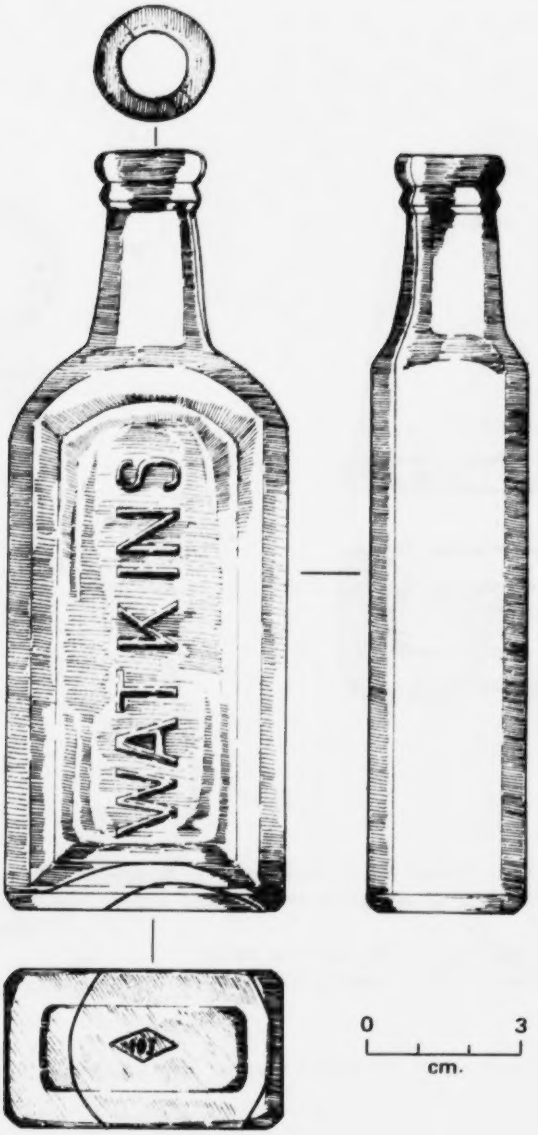


Figure 6-14. Rectangular, clear medicine or extract bottle from root cellar of Feature 2, Blackburn Homestead (45-DO-182H).

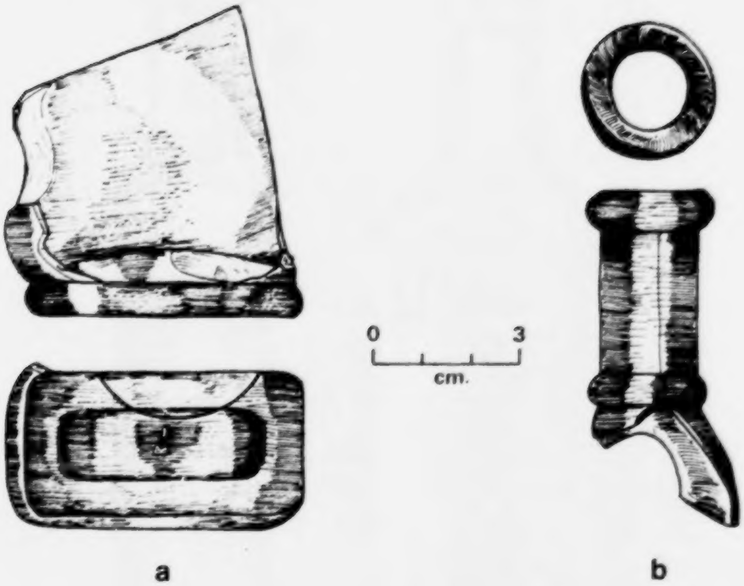
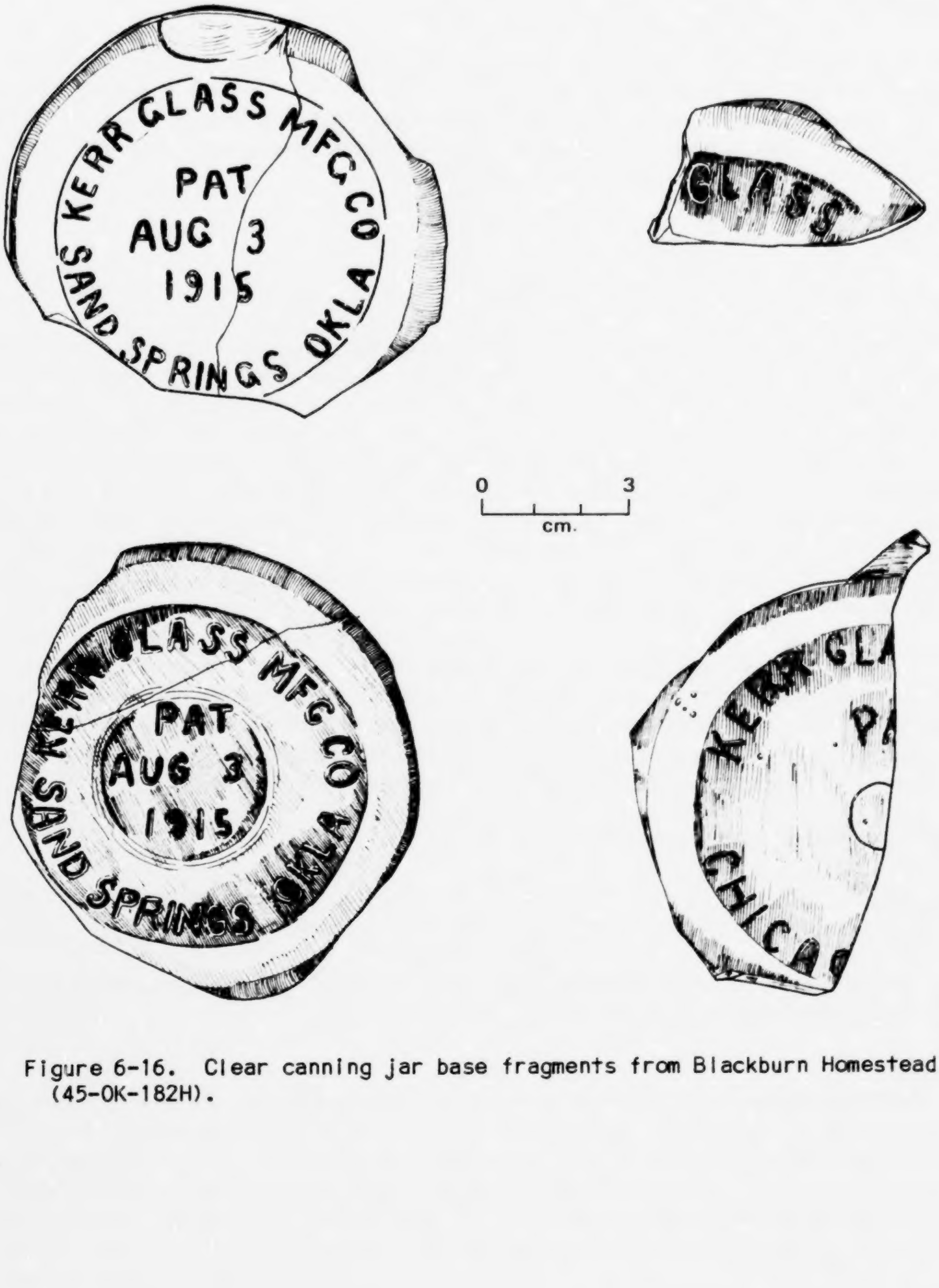


Figure 6-15. Clear medicine bottle fragments from root cellar of Feature 2, Blackburn Homestead (45-OK-182H).

a. Clear medicine bottle base
b. Clear patent medicine bottle neck


KERR GLASS MFG CO
PAT
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KERR GLASS MFG CO
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KERR GLA
PA
CHICAG

Figure 6-16. Clear canning jar base fragments from Blackburn Homestead (45-OK-182H).

from the Feature 1 structure. In addition, four canning jar liner fragments were recovered from the area outside Feature 1 structure.

CERAMICS

Three ceramics fragments representing three vessels were recovered from the floor of the root cellar and the root cellar fill. Two fragments are plain white earthenware. One has a scalloped rim and one is of soft paste porcelain. The latter is very waterworn and may have been collected from the river and brought to the site at some time.

METAL

Nails and Other Construction Fasteners

Three broken square common cut shanks, 28 common wire nails, including 23 of several sizes (3d, 6d, 8d, 9d, and 12d), and one tack were recovered. The tack, the square nails and most of the wire nails were located in the root cellar fill of Feature 2. Three wire nails were recovered from Feature 1 and one from Test Unit 4. Two wrought iron staples, one measuring 1 5/8 in and one measuring 9/10 in, one wire staple and one large nut (3/4 x 3/4 x 1/4 in) were also recovered from the root cellar fill and one wrought iron staple (1 5/8 in) was recovered from Feature 5.

Tin Cans

Most of the 350 or so tin can fragments recovered from this site were from open-top cans and resealable containers. Several were fragments of a sardine can. Two open-top lids, two resealable canister lids, and the only complete open-top can were recovered from the root cellar floor. The remaining fragments were recovered from the Feature 1 structure.

Miscellaneous Metal

Clothing Fasteners. One overalls clasp (Figure 6-17) and a safety pin head were recovered from the fill of the Feature 1 structure.

Handle/Pull. One drawer handle or pull (4 x 1 5/8 in) was recovered from the fill of the Feature 1 structure.

Wire. Wire of several types was identified, including picture wire, single strand and double strand; copper wire, stapled barbed wire, and twisted double strand wire. One wire fragment was recovered from outside the Feature 1 structure; one fragment from the burned area (Test Unit 4) and a remaining fragment from Feature 1. Also recovered from Feature 1 was a wire fragment with two chain links that appears to be a homemade device.

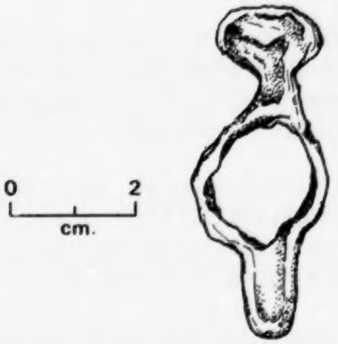

Figure 6-17. Overalls clasp from Feature 1 structure, Blackburn Homestead (45-OK-182H).

Bracket. One bracket (5 1/2 x 3/8 in) was recovered from the floor of the root cellar.

Axe, Bucket. One axe blade fragment (4 1/2 x 4 1/4 x 1 in) was recovered from the structure of Feature 1 and one complete but damaged galvanized bucket (10 in high) was recovered from the surface.

Sheet Metal, Pipe. Five sheet metal fragments were recovered from the surface of the site. Two fragments include attached nuts and bolts. Also identified on the surface was a pipe (22 x 1 1/2 in) with two smaller soldered pipes attached, one with an attached circular handle.

Harness Fittings. One harness ring, 2 1/4 in in diameter, was recovered from Feature 1's structure.

Springs. One spring was recovered from the dumping area.

Stove parts. Stove parts, including an aluminum ring from an electric stove and a cast-iron gas stove burner fragment, were recovered from the surface of Feature 1's structure.

Coin. One Lincoln penny dated 1918 was recovered from the rectangular pit.

Miscellaneous. Twenty fragments of unidentifiable scrap metal were found throughout the site and one unidentified circular copper object (1/16 in diameter) was recovered from Feature 1's structure. One circular object with a convex side (1 1/4 in diameter) and no identified function was found in the burned area (Test Unit 4).

Miscellaneous

Three miscellaneous items were recovered from three of the excavation units. A plastic shotgun wad was recovered from the structure of Feature 2 and an unidentified black plastic fragment with toothed edges was recovered from Test Unit 4. A leather strap fragment was found in Feature 1's structure.

Several Indian artifacts were also recovered at the site. They include 11 cryptocrystalline flakes, one cryptocrystalline chunk and one quartzite knife. Feature 1's structure contained five flakes and the quartzite knife; Test Unit 3 contained five flakes and a chunk, and Test Unit 4 contained one flake.

In summary, artifacts recovered from the test units excavated at 45-OK-182H do not associate the site with a particular ethnic group. The evidence does, however, indicate that it was part of a homestead occupied for a few years. The builder of the two dugouts remains unknown although Blackburn is a likely candidate. We suspect that he at least roofed them over and used them as outbuildings. The Blackburns seem to have been squatters who stayed for a few years and left. Thereafter, the site was used as a stopping place or picnicking area for boaters and other casual visitors. The concentration of manure in the upper deposits of Feature 1 suggests the site was also used as a shelter for sheep or perhaps as a sheepherder's quarters after the homestead was abandoned.

45-OK-298H — LOVE HOMESTEAD

This site is essentially a refuse scatter located on property first owned by Grace M. Love. She took out a homestead entry on the site in Lots 3, 4 and 5 in Section 17, Township 30 North, Range 28 East, in 1939 (General Land Office Records, Bureau of Land Management Archives, Portland). She evidently lived on the property for some years prior to the patent while her name was Marchesseault (Baines Title Co., Okanogan; Fred Timm, personal communication 1977).

The site is on the north bank of the Columbia River, 1,720 ft downstream from RM 567 (Figure 1-1), at an elevation of 950 ft. above m.s.l. on a grassy slope. Prior to the creation of Rufus Woods Lake, this property was about 66 ft above the river and adjacent to Parsons Rapids (General Land Office Field Notes, Bureau of Land Management Archives, Portland). Homesteaders came here to gather driftwood at the rapids for firewood, fenceposts, and for constructing buildings.

A small collapsed fence enclosure, built of unevenly spaced posts, sheep wire and barbed wire, was the only structure found at the site. It could have been used to hold stock or to protect a small garden. In either case, it suggested that the dwelling and outbuildings of the homestead were once nearby but probably had been flooded away by the reservoir.

Objects from the site were recorded but not collected. They are listed below.

Domestic objects: canning jar lid, door pull, draw bolt eye.

Construction hardware: hand-molded bricks, butt hinge, lumber with round nails.

Transportation: car/truck hood, wagon parts.

Miscellaneous: wire, foam rubber, driftwood, unidentified metal tube, sheet metal scraps.

45-OK-308H — PETERSON/COLWELL/MACHESSEAN HOMESTEAD

This property was owned by Samuel Peterson who obtained it by a cash entry patent in 1918 (General Land Office Records, Bureau of Land Management Archives, Portland, Appendix A). In 1928, the County Treasurer deeded Lots 1 and 2 of the property in Section 17, Township 30 North, Range 28 East, to Anna S. Colwell. Within a year she had sold the property by contract to V.G. and R.A. Machessean. This contract was cancelled in 1931 and the Colwells regained the land and held it until 1946 (Assessor's Office Records, Okanogan County Courthouse). The site is known locally as the "Colwell place" (Fred Timm, personal communication 1977) but it is not clear whether the Colwells lived there or built the buildings.

The site is on a broad, flat alluvial fan which rises abruptly from the river on the north bank 1,720 ft downstream from RM 560 a Gaviota Bend (Figure 1-1). The elevation of the site is about 950 ft above m.s.l. Most of the land surrounding it was being cultivated during the survey; unplanted sections were covered with sagebrush and grass. An early description of this property indicates that it had poor soil, no timber, and was covered with sagebrush (General Land Office Field Notes 1907, Bureau of Land Management Archives, Portland, Appendix A).

Most of this original homestead was destroyed so the land could be farmed. According to Mr. Timm (personal communication 1979), there had been a two-story balloon frame house and a windlass on the terrace near the river. The windlass had been used for hauling water. All that remained at the time of our investigations were the barn and several associated features which are listed in Table 6-7 and shown in Figure 6-18.

The barn was a single room, one story log building with a dirt floor. It was still standing but the roof had begun to collapse (Figure 6-19). The barn had no foundation and the log sills rested on the ground. The wall logs appeared to be driftwood, which had been peeled but left round. Only one sill was square hewn. It had several auger holes which, according to the Fred and Harold Weber (personal communication 1977), were used for bolting logs together to form rafts of timbers which were then floated downriver to building sites. The walls were fastened at the corners by square notching and the door and window frames were nailed to the wall logs. Boards were

Table 6-7. Feature type and dimensions at 45-OK-308H.

Feature	Type	Dimensions (ft)
1	Log Barn	16 x 32
2	Gate (?)	2.8 x 10
3	Gate	5.6 x 15
4	Excavation	15 x 20
5	Loading chute	4.5 x 7
6	Corral	20 x 50
7	Fence	---
8	Wire spool	3 (dia)
9	Barbed wire fence	---

sometimes put between the logs to level them and serve as chinking. Triangular split poles were often nailed to the inside walls to serve the same purposes. The single doorway opened to the corral area. The building's two windows were on the back wall and shuttered with boards. The gable ends were a continuation of the log walls, unlike most of the log buildings in the project area where the gable ends of the walls were covered with vertical boards. The roof was framed with three logs, two of which were purlines running lengthwise halfway along the roof pitch. The third log was the ridgepole. The purlines and ridgepole were all shorter than the full length of the building. Each was extended by a second log fastened to it with a lap joint and braced underneath. The use of these short logs suggested to us a scarcity of construction wood. Four driftwood logs were found near the west side of the barn. Split boards of random measurements covered the roof but did not weatherproof the building. Since no shingles were found in the area, it was assumed that the roof had a sod or earth cover. A single wood feed trough ran along the entire interior rear wall. A 50-gallon drum that had been split lengthwise to make another trough was found inside the wooden one. The original position of the drum trough could not be determined. Round common nails and strap hinges were used to construct the barn. Fastened to its walls were round nail staples and "O" rings to hang tools or the harness equipment.

A corral (Feature 6), the north wall of which was the barn, was located to the south. The corral had collapsed but had been reconstructed by setting fence posts side by side to form southern and eastern walls. Barbed wire tied to wood rails located between the posts was used to tie one post to the next. The rails were pole and board scraps. The west wall was constructed of a horizontal log and barbed wire. The livestock entered the corral near the southeast corner of the bar guided by another fence, Feature 7. Paralleling the northeast side of the corral, this fence was built of boards and braces, just as the corral was, and wired to a fence post. This rather heavy section

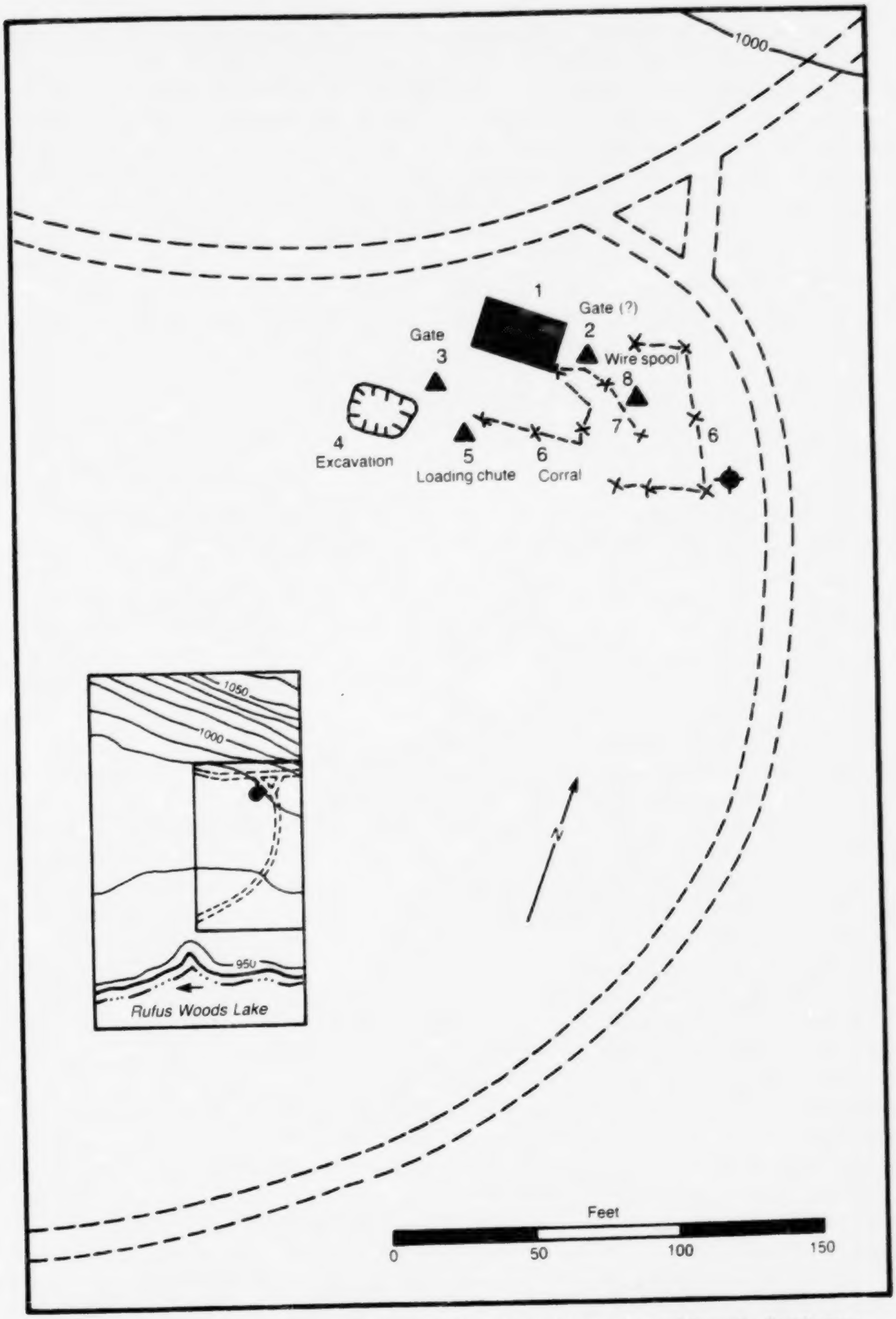
1000
1
Gate (?)
2
Wire spool
8
Gate
3
7
6
4
Excavation
5
Loading chute
6
Corral
N
1050
1000
950
Rufus Woods Lake
Feet
0
50
100
150

Figure 6-18. Colwell Homestead (45-OK-308H) and cultural features identified. For legend, see Appendix B.

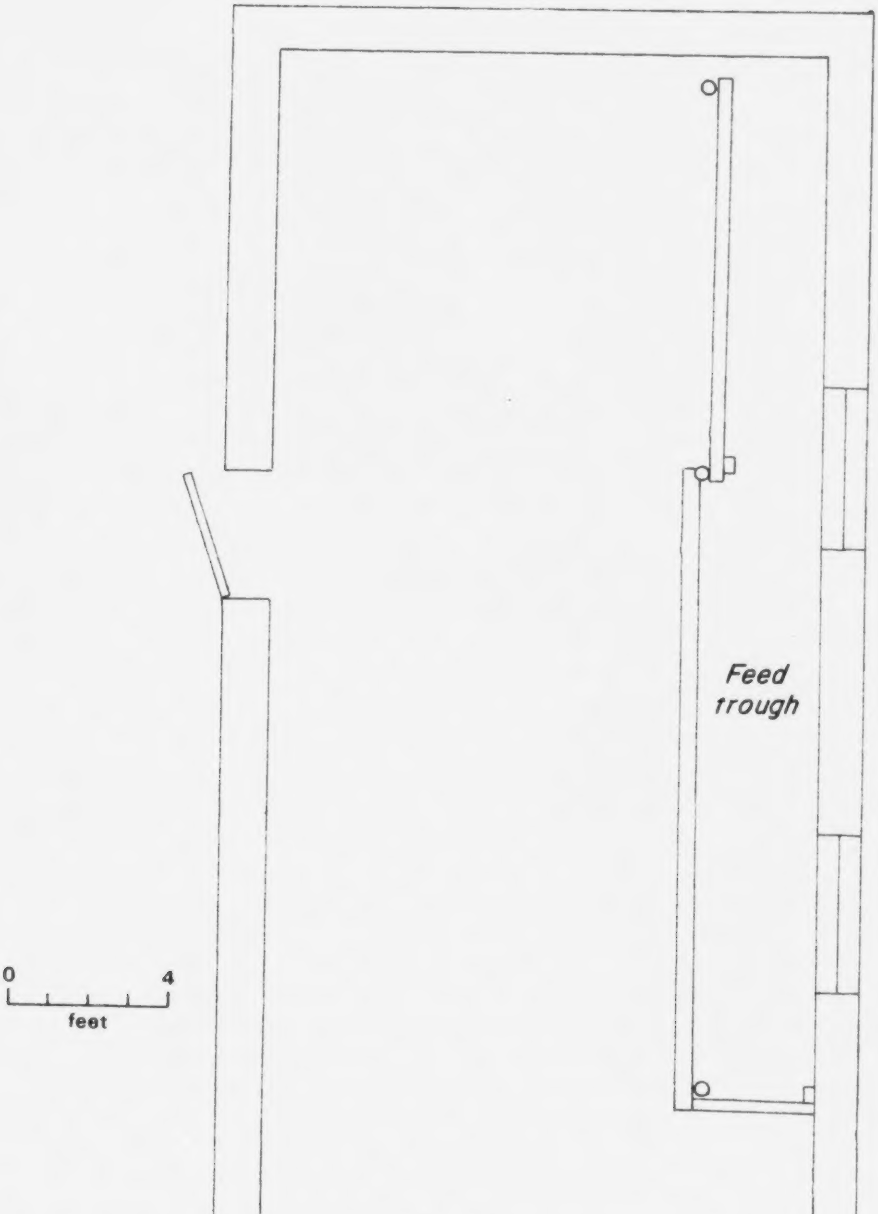
Feed
trough
0
4
feet

Figure 6-19. Log barn floor plan (Feature 1), Colwell Homestead (45-OK-308H).

may have been a gate built into the southwest corner of the corral. Feature 5 was a ramp with walls used as a livestock loading chute.

Other structures in the vicinity of the barn were Features 3, 4, 8 and 9. Feature 3 was an unattached gate found on the ground. It was constructed of boards and 1 x 12's fastened with round common nails. The gate was fashioned by nailing three boards lengthwise to brace it at the ends and middle and then adding a diagonal board brace. It had two handmade pintle hinges forged from water pipe, welded to strap iron, and fastened to the wood with carriage bolts.

Feature 4 was a rectangular excavation whose original function is unknown. It did not appear to be a root cellar, although a log was found embedded in one of the walls. We believe it was a refuse dump for the corral lumber after the site was abandoned.

Feature 8 was a wire spool found lying outside the corral. There were no electrical fixtures or hardware associated with the site so the spool may have held fencing wire. It is not necessarily associated with use of the original barn.

Feature 9 was the remnant of a barbed wire fence found primarily on the east side of the site. In some places, four strands were still attached to standing posts.

The two roads found near the site were being used by the present land owner, so we do not know whether these were part of the homestead.

45-OK-319H -- SCHUMANN HOMESTEAD

Located on the north bank of the Columbia River, this site is on property in Section 35, Township 30 North, Range 26 East and patented as a homestead entry by C. H. Schumann in 1922 (General Land Office Records, Appendix A). No historic records before that date mention the site, so we presume it was built no earlier than 1917. Mr. Schumann held the property until 1944 when it was sold to Kitty Deer (Okanogan County Assessor's Office Records).

Munsell and Salo (1977) divided the site into two sections. The larger section is closer to the river, approximately 1,050 ft above m.s.l., and marked by "fence cairns." By the time of our historic survey, the cairns were gone. The other section is farther from the riverbank, 2,375 ft downstream from RM 553, (Figure 1-1) at about 1,080 ft above m.s.l. in the S.E. 1/4 S.E. 1/4 of Section 27. This part is not within either guide-taking or real estate-taking lines, so no features map was drawn. We did, however, record the many features located near the dwelling area, located on a gentle slope covered with old growth sagebrush. The only trees on the homestead were deciduous and grew along the two ravines formed by a small annual stream that ran behind the house. The features are described below.

The house was the most prominent feature at the site and could be seen for some distance as one approached. It was a frame building with a single main room, an attic and a cellar (Figure 6-20). The basement part of the house may have served as a root cellar, since no detached cellar was found. The cellar floor was 5 ft below ground level; its walls were constructed of granite and basalt fieldstones set with mortar. The cellar floor was dirt and a bench ran

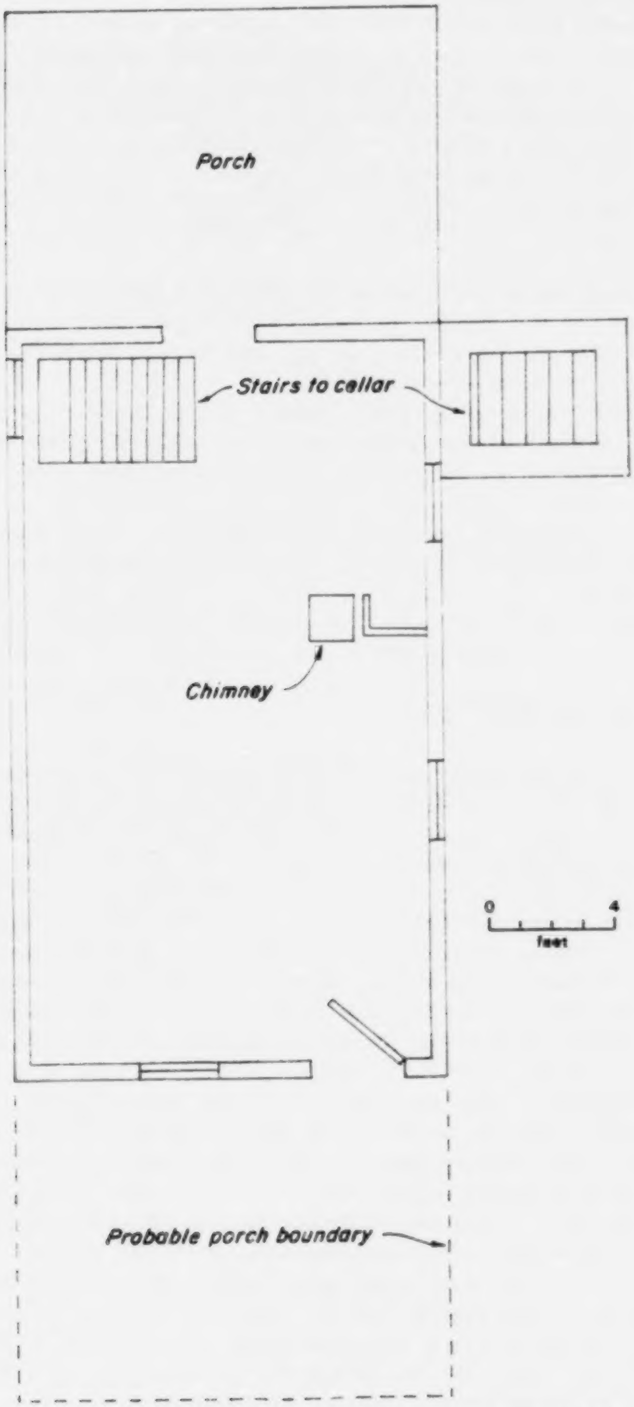
Porch
Stairs to cellar
Chimney
0
4
feet
Probable porch boundary

Figure 6-20. Dwelling floor plan of the Schumann Homestead, 45-OK-319H.

along one wall; storage racks were fastened to the main floor joists. The cellar could be entered from outside through a door and a stairway; or, through a trap door and stairway from the main floor.

The floor of the main room was constructed of a ship-lap board base covered with 3-in wide tongue and groove boards. The walls were also covered with ship-lap and then wallpapered. Ship-lap covered the ceiling and concealed the attic floor joists. Fallen concrete chimney blocks and the framing of a partition about 2-ft wide along the east wall indicated the location of the stove area. No other structures interrupted the floor space. The remnants of a shelf occupied the full height of the north wall and suggested that the northeast section of the house may have been the kitchen.

A ladder nailed to the north wall led to the attic through a trap doorway in the north-central part of the ceiling. The attic itself was a single room blocked only by a row of studs along its east side.

The exterior wall of the dwelling had a ship-lap base covered by thin clapboard. The roof was gabled and shingled. Remnants of porches were found on both the north and south sides of the house and appeared to be part of the original construction. Including these porches, the house was 45 ft long. Windows were in every wall and doors were on the north and south walls. All door and window casings were commercially made; the sashes and doors were missing. Round common nails were used throughout the dwelling.

West of the house was a large area surrounded by a fence and several associated features. The fenced enclosure was recorded as a rectangle about 30 x 65 ft. The fence was chicken wire attached to fence posts, strengthened by horizontal pieces of driftwood. The enclosure may have been a yard or a garden since it extended beyond the rectangular enclosure and may have originally surrounded the entire dwelling area. The northern arm of this fence was constructed of stones and chicken wire that stretched for 35 ft where it turned to the east and continued some distance only as chicken wire. An isolated east-west stone alignment was probably originally a part of the eastern line of fencing. To the south, a stone alignment extended the rectangular enclosure to the east. Because this stone alignment did not turn to the north-south, it was presumed originally to have continued east in front of the dwelling. Finally, a north-south stone alignment and scattered sections of chicken wire on the east side of the dwelling, may have been the eastern boundary of the large fenced enclosure. If so, the enclosure would have formed a yard around the house. Two surface scatters of fence posts and lumber were found inside the fence. These are believed to have been debris from cleaning the homestead area after it was abandoned.

Two circular depressions were found behind the dwelling. Both had been backfilled but one of these had been redug, probably by vandals searching for artifacts. The proximity of these holes to the dwelling and a stream bed suggested that they were wells, but only excavation could verify this. Board debris, probably from the house's destroyed back porch, was scattered over the depressions. Some of the boards may have been used as a safety cap for a well.

A board scatter was found to the south of the house in an area that had been cultivated. The pile of fence posts and lumber was probably piled there during a clearing operation after the homestead was abandoned. Two separate rock piles near the board scatter were stones that had been cleared from the fields prior to cultivation and transported by a stone boat to where we found them. Near the board scatter was a skid that may have been used to haul the rocks. The handmade implement was built from two parallel wood logs braced at the ends and in the center by cross boards fastened with round nails, baling wire, nuts and bolts.

A second building was identified as a stable rather than a root cellar since its front wall was not enclosed. It was a U-shaped shed dug into a small hill. Inside the excavation, three unmortared fieldstone walls were raised and the excavation filled in around them. The roof, which was independent of the walls, was elevated by vertical driftwood logs placed at its corners. Driftwood log plates and a ridgepole were nailed to these posts forming a gabled roof. The roof timbers were split logs nailed irregularly over the gable. The large gaps separating the roof timbers suggested that the roof also had a sod or earthen cover. Round common nails were found in the roofing timbers and cast-iron square shank spikes in the corner posts and plates.

Two privy pits and associated lumber and debris from the buildings were to the northeast of the dwelling within a reconstructed fenced enclosure. Vandals had redug both pits; various artifacts--earthenware vessels, bottle fragments and window glass--were found scattered on the surface. The lumber debris was a poorly preserved aggregate of 2 x 4's, 1/2 x 12's, puncheons, poles, and shingles. The artifacts associated with the pits indicated that they were being used as refuse dumps.

A third building was tentatively identified. Investigators found a partially buried line of basalt and granite cobbles about 1.5 ft wide, suggestive of a foundation. The stones formed one right angle, but the other two putative lines were not found. A nearby board scatter was further evidence that this was once a building. Despite the boards' extremely poor condition, 2 x 6's, 2 x 8's, and ship-lap lumber were recognized. Round common nails were found in some of the boards. Fence posts (with barbed wire attached) and driftwood were also part of the scatter. Tumbling mustard, a plant that thrives in disturbed areas, grew all about these boards and stones. Other features found near the building suggest that it may have been a barn.

Two refuse dumps were found at the site. Both were above ground level. One was located in the dwelling area and was a small part of a general refuse scatter. Most of the objects were associated with domestic activities and the dwelling, although several may have been deposited after the homestead was abandoned. The domestic artifacts included a tin can lid (Hershey's Cocoa), evaporated milk cans, condiment cans, canning jars, lids and glass seals and ceramic utensils. The only personal items were medicine bottles and the only agricultural/industrial objects were a fine toothed saw and iron spike.

A second dump was located a considerable distance from the dwelling and, although the refuse was not buried, the location probably was chosen to conceal debris from view. Again, most of the objects found were associated with domestic activities although a few personal and miscellaneous objects were recorded. Identifiable objects are listed below.

Domestic Objects: canning jar (Kerr Mfg. Co...Prings Okla., Pat. Aug. 3, 1915), canning jar seals (...uine Boyd ca...), glass vase fragments, clothes iron trivet, tin sieve, unidentified tin cans, evaporated milk cans, can lid (Crescent Baking Powder), sardine can, ceramic utensils (Colonial... Terling China Patented 1915 and Silesia)

Personal Objects: medicine bottles, ceramic soap dish, leather shoes.

Miscellaneous Objects: window glass, zinc flashing, dry cell batteries.

45-OK-321H -- BRESLIN HOMESTEAD

The first record of this site, in Section 18, Township 29 North, Range 29 East, was a homestead entry patent taken by Patrick Breslin in 1922. Mr. Breslin did not hold the property long; it was sold in 1926 to R. Insinger. It continues to be called the Breslin Homestead although we do not know who the single feature and artifacts we found are associated with.

The site is located on Washington State land on the north bank of the Columbia River, 2,460 ft upstream from RM 547 (Figure 1-1) at an elevation of 1,040 ft above m.s.l. Located on an alluvial fan at the extreme northern boundary of Bridgeport State Park, it was not inside the guide-taking or real estate taking lines and so was not mapped. Recent stream erosion was noted to the northeast and in front of the site. Granite outcrops, which give the area the appearance of a box canyon, bound the area to the north, east, and west. The vegetation was tumbling mustard and quaking aspen (Populus tremuloides). Sagebrush and grasses also grew there.

The single feature found is believed to be a retaining wall. It was 40 ft long, 2.5 ft thick (at its maximum), and 5 ft high, constructed of dressed, but unmortared granite stone of varying sizes. The structure only had two walls, one of which ran 40 ft to the east and west and another which was a 7-ft span on the west side. Behind the wall, the land sloped gently to the south. No evidence of buildings or structures was found on this artifical terrace.

Several artifacts were found on the surface near the quaking aspen trees and in the western area of the site. Some were associated with the homestead and others were undoubtedly litter thrown from the road behind the site. There were numerous tin cans, including tobacco cans, food cans, modern beer cans, and unidentified cans. Among the glass objects were modern soft drink and beer bottles, likely deposited there recently, and a decorative vase fragment, probably from the homestead. Tools and metal objects included barbed wire, a tie bolt from a wagon, buckets, a basin, a pitch fork, an enamel pot and a car leaf spring. The artifacts were in an area that was being used as a target range; many artifacts had been or were being destroyed by the target shooters.

7. FERRY CROSSINGS

Ferries played an important role in the historical development of the project area. From the late nineteenth century to the late 1920's, three ferries transported miners to the Okanogan mines, livestock to the summer pastures on the Colville Reservation, and homesteaders to both sides of the river. Ferries were also reputed to have carried stolen livestock, illegal liquor, and other contraband. The first ones that crossed the Columbia in the project area were little more than barges which were rowed or had sweeps to propel them. Lighter and more maneuverable cable ferries soon replaced these early models.

Cable ferries were designed to use the force of the river current to propel them across. As the ferry left shore, it was set at an angle to the river's axis in order to maximize the force of the current striking its hull. An overhead cable spanned the river and functioned as a stationary guide to keep the ferry from going adrift. It was called a guide cable and was attached to the ferry both fore and aft by vertical cables called lead or attachment cables. Wind cables were also attached to the bow and stern of the ferry. These attached the ferry to the anchor on shore. By loosening or tightening windlasses located at each anchor point, operators could turn the ferry into the current.

A cable ferry was in greatest danger when it turned completely around, twisting the attachment and wind cables and sometimes snapping them, casting the ferry adrift. This was not an uncommon mishap and is recorded to have happened to two of the ferries in the project area. When the end of the ferryboat era drew near, the boats were not retrieved when lost downriver. When bridges, dams and roads came into the area, traffic patterns changed, and the once vital ferries quickly became obsolete.

45-OK-249H -- HOPKINS FERRY

Hopkins Ferry was one of two ferries which served the Alameda Flats area. The first ferry was a barge purchased from Walter Jones who had used it as a ferry at the mouth of the Spokane River. It was towed to the Columbia River in 1919 and remained in operation until Hopkins built a cable ferry (Bicentennial Association 1976:262) which probably operated throughout the 1920s. Photographs of the barge and cable ferry are included in Ferry Boats on the Columbia River (Ruby and Brown 1974:139). The Hopkins Ferry hauled produce and stock to and from the reservation and contraband as well. As Ruby and Brown note:

> It was an out-of-the-way area [Alameda Flats] and ideal for swimming and ferrying stolen stock. Such nefarious activity was of inter-state and international proportions. Stolen Canadian horses found eventual homes in Oregon and vice versa. It was also a good place for crossing Canadian liquor smuggled into the state during Prohibition days (1974:139).

While we did not discover precisely when the operation closed down, Bicentennial Association notes that the ferry was lost when it reportedly broke its cable and drifted free. One story related that the ferry broke loose with two men and a load of sheep (Bicentennial Association 1976:263). The other attributed the loss to inexperienced ferry tenders who, while on a family outing, set the barge into the stream incorrectly, causing the cable to twist and break. The barge was recovered near Box Canyon and saved from destruction (Bicentennial Association 1976:295). Such occurrences may have resulted in the suspension of ferry service but no source confirms that. Presumably, the Hopkins Ferry service ended sometime in the 1920's.

Remains of the ferry landing on the Okanogan County side of the river, designated 45-OK-249H, consist only of some fallen logs and a steel cable which had been moved by bulldozer. They occur on a fairly steep river terrace at approximately 1,050 ft m.s.l., 3,115 ft downstream from RM 579, in Section 25, Township 31 North, Range 29 East. No archaeological evidence of the ferry landing was found on the opposite bank of the river.

45-DO-263H -- PENDELL FERRY

The history of this site is more complex than its single name, Pendell Ferry, implies. The property, in Section 8, Township 30 North, Range 29 East, was homesteaded by Samuel N. Hammer in 1913 (see 45-DO-261H). Nearby, George B. Cooley owned a homestead on Alameda Flats and allegedly ran a store at Stout's Landing (Fred and Harold Weber personal communication 1977). In 1912, Cooley was operating a store and row ferry on the Hammer property (Bicentennial Association 1976:262, 327; Ruby and Brown 1974:138). Apparently, Cooley tried to replace the row ferry with a cable ferry, but when he requested permission to use a landing site on the reservation he was refused. It was reasoned that the ferry "would greatly facilitate the operations of a gang of horse and cattle thieves that infest the north central part of this state" (Colville Indian Agent quoted in Ruby and Brown 1974:138). Mr. Cooley must have lost interest in this venture since the row ferry was still being operated by a Mr. Kildeer in 1916 when it was sold to Willice Pendell (Bicentennial Association 1976:262). In the same year, the Colville Reservation was opened to homesteading and the former restriction must have been lifted because Pendell immediately put in a cable ferry. Shortly after its installment, the overhead cable broke, casting the ferry adrift with a cargo of sheep. It was finally recovered just upstream from Box Canyon. The cargo was safe, but the barge was so extensively damaged that it was not brought back upriver (Bicentennial Association 1976:327,353). Pendell replaced this barge with another and later sold it to his brother, Jack Pendell. Jack operated the ferry for three or four years and built a store with a dancehall above it on the Douglas County side of the river. Fred and Harold Weber (personal communication 1977) believed that another dancehall was located on the Okanogan side of the crossing, but we could not verify this. Finally, the Pendell Ferry was sold "to a Bridgeport man" who ran it until 1925 when it was taken downriver and put to work at Pateros (Bicentennial Association 1976:327). Nevertheless, the Pendell Ferry crossing was illustrated on a Colville Indian Reservation "Fire Control Map" as late as 1930 (Office of Indian Affairs Records, Federal Records Center Archives, Seattle).

The site is located at the edge of the south bank of the Columbia River, 1,720 ft downstream from River Mile 574 (Figure 1-1), at an elevation of 960 ft above m.s.l. in Douglas County (Munsell and Salo 1977). During our investigation, sagebrush and low grasses grew along the riverbank, but on the terrace behind the bank were large areas of grass and dune.

The two building foundations and root cellar found at the site are believed to have been associated with the ferry landing complex. The wooden superstructures of these buildings were gone, swept away by a grass fire (Fred and Harold Weber personal communication 1977). Physical evidence at the site confirmed that the buildings had been burned. Although our informants said that a "leveling post" for the ferry cable was still standing at the site, we did not find it nor any other other structure associated with the ferry operation. Vandalism and flooding as well as the grass fire may be responsible. The three features we did find are described below.

Feature 1, a concrete foundation measuring 16 x 24.5 x 5 ft, was found by Munsell and Salo (1977) and identified as the "China Store," a nickname of unclear origin. While both Jack Pendell and George B. Cooley had once operated stores at this site, no evidence could be found to associate this particular feature with Chinese workers. "China" may have referred to ceramic wares, i.e., a ceramic store. Indeed, evidence that the building was actually the remains of a store was slight. The badly eroded foundation was in the riverbank. Its north wall had collapsed but the other three were intact. This proved helpful for our purposes since erosion had opened a cross section of the foundation to view. Apparently, the builder had dug a pit for the foundation and built wooden forms for the interior walls. Impressions of horizontal boards used as forms were visible on the remaining concrete. Below ground surface, the concrete appeared to have been poured between the walls of the excavation and the board molds; above the ground surface it was poured between wood board molds built for both interior and exterior walls. The concrete was a crude sandy mixture that was rapidly deteriorating, particularly below the surface on the exterior walls where it contained more pebbles and cobbles. The superstructure was most likely a frame construction built of wood since neither cobbles nor mortar was found. There were many common round and machine-cut square nails scattered in the vicinity. A few "diamond head" square shank spikes were found, possibly indicating that fairly large framing timbers were used. Although domestic artifacts were scattered in the area, they were too few to suggest the building's function.

Another concrete foundation at the site, Feature 2, measured 35 x 51 x 3 ft. It was not included in the Munsell and Salo (1977) reconnaissance. This structure was in ruinous condition and overgrown with sagebrush. Fred and Harold Weber (personal communication 1977) believe it may have been the Pendell Ferry store and dancehall, which, considering its large size, is possible. The foundation was a split-level, L-shaped structure. A large rectangular enclosure was located on the flat terrace overlooking the riverbank; a squarish cellar set on a step excavated into the riverbank was attached to it. Concrete walls completely enclosed the 16 x 21 ft cellar. A single, partial doorway in the cellar's south wall probably led to the main floor. A concrete block, 1.9 x 1.9 x 3 ft, was found near the southeast corner of the cellar. Since it was higher than the surrounding cellar foundation, it was probably a chimney base rather than a girder footing. Sections of all the walls had collapsed, partly due to the poor concrete mixture. A few fragments of charred lumber were found on top of the walls, evidence that this foundation, like Feature 1, probably supported a wooden building. The 2 x 4-in stud molds and a step for the sill that were found indicate the building had a light frame construction.

A large number of artifacts were found scattered within and about the foundation. Many of the non-metal artifacts were burned or melted. The following objects were associated with Feature 2.

> Domestic Objects: stoneware vessel fragments, earthenware vessel fragments, porcelain vessel fragments, bottle glass (clear, amethyst and milk colors), tin cans (variety of sizes and shapes), iron ladle, shovel, stove pipe, sheet iron stove part, lantern fragments, gas/kerosene can, water tank, cast-iron stove decoration, stove grate, chair springs.
>
> Hardware: window glass fragments, round nails, brads, iron sheet metal, water (?) pipe with crimped seam, barrel hoops, wire, door lock.
>
> Miscellaneous Objects: iron rod, unidentified rubber fragments.

The items described above are common domestic items which might be found in either the inventory of a general store or the furnishings of a private home. Only the nails and brads, found in two piles along the west wall, were in sufficiently large quantities to suggest store stocks. A systematic collection could be made to determine whether the quantities and spatial organization indicate a store or a home.

Feature 3, found in the current riverbank, is the badly eroded remnant of an excavated structure. Only the rear wall and rear half of the side walls, measuring 11 x 23 x 4 ft, remain standing. Stones found in the excavation were probably used to face the earthen walls. Although in poor condition, this feature is identifiable as a root cellar because of its typical construction style--a squarish excavation into a hillside, with reinforced walls.

Site 45-OK-263H is unique because concrete was used in constructing foundations. Althought concrete mortar also was found at sites 45-OK-174H and 45-OK-319H it was not used exclusively for masonry. In addition, Feature 2 may be the most complete example of a store or community building within the project boundaries.

45-OK-180H, 45-DO-202H, and 45-DO-203H -- CONDON FERRY

Condon Ferry is perhaps the most famous historic site within project boundaries. Listed in the Washington Register of Historic Places, it is a site of local and, to some extent, regional importance. The wealth of legends and facts about the crossing make it difficult to assess how the artifacts and features we uncovered may have been used. What follows are the results of our historic research and the findings of our test excavations at 45-DO-202H.

The ferry and trading post were built by Samuel Wilbur Condit, who left New Jersey for California to prospect for gold (Kingston 1946:131). Locally, Condit was better known as "Wild Goose Bill Condon." The origin of this nickname is recounted in numerous and often contradictory tales, but this much remains constant: Condit was working as a packer on the trail from Walla Walla to the Canadian gold fields when he came upon a flock of tame geese. Believing them wild, he shot several. The owner of the geese varies from tale to tale: Catholic priest, pioneer wife, Indian woman. But of whatever sex or race, the owner stormed upon the scene with such outrageous anger that Condit found it humorous and recounted the incident many times (Kingston 1946:129; Weber and Wyborney 1970:1), thus nicknaming himself. It was on a trip through north-central Washington in 1875 that Condit found the land where he built his ranch (Kingston 1946:133). Shortly thereafter, settlement of the region began in earnest. The land surrounding his ranch became the town site of Wilbur, one of the first settled areas in the northern Big Bend region. Condit's land was between the division point of the Northern Pacific Railroad at Sprague and the new settlement area. After gold was discovered in western Okanogan County, the flow of goods and people increased. Condit, seeing an opportunity to profit from this expanded market, constructed a road from his ranch across the Grand Coulee and down to the Columbia River where he built his first ferry about 1885. Along this road, Condit carried as much as 3,000 to 4,000 pounds of merchandise per trip from Sprague to his trading post and then on to the mines along the Columbia (Kingston 1946:135).

Condit's first ferry was a row ferry consisting of "five big logs fastened together with log chain, grass, rawhide ropes [and] propelled by manpower" (Ruby and Brown 1974:31). By 1886, he had installed a 1,400 ft cable and built a new barge for a cable ferry (Weber and Wyborney 1970). The barge could carry four teams, and an empty wagon, or about 25 head of cattle (Weber and Wyborney 1963). On the north side of the river, Condit made use of a road from Goose Flats to the present town of Okanogan. Photographs of the ferry are found in Ruby and Brown (1974). Condit also built a small trading post on the south side of the river which included a store (10 x 20 ft), another building on stone foundations (10 x 10 ft), and a log barn some distance south (Weber and Wyborney 1970:4). From here he sold "flower [sic], sugar, beans, and bacon: some utensils and implements; overalls, blankets, calicos, and a variety of articles that appealed to the Indian trade" (Kingston 1946:135). His best selling item, however, seemed to be whiskey. By 1887, Condit's trading post operation could not handle the traffic passing north to the mines of Ruby and Conconully, and when fire destroyed the riverbank store, Condit decided to expand his operation. By 1890, his enterprise was thriving. By the ferry stood a small settlement of Condit's making. There was a hotel, a root cellar, a combination store and saloon, a cistern, two dugout shelters, an outdoor toilet, a barn and yard surrounded by split rail fences, a combination carriage shed and smokehouse, a blacksmith shop and a livery barn (Figure 7-1). Both the ferry and the trading post prospered until the early 1890's when a silver depression and the destruction of Ruby and Conconully by fire and flood signalled a permanent decline in Condit's enterprise. In 1895, Condit was killed in a gun fight over Millie Dunn who had refused to marry him.

After Condit's death, the ferry and trading post passed to other owners, none of whom possessed Condit's extravagant manner. The ferry operation thus continued to be known as Condon Ferry. Weber and Wyborney (1970) list the owners of Condon Ferry as: Samuel Wilbur Condit (1885-1895), Charles (Willy) Condon (1895-1901) and ? Flahery (1896-1901), Julian Bryan (1901-?), Frank Cotter (1920-1926), and the Vance Brothers (1926-ca. 1928).

The ferry, and, to a certain extent, the trading post, were as busy under later ferry tenders as they were under Condit's ownership. The flow of traffic remained from north and south, but cargos changed to mainly livestock and homesteaders, more like the commerce on the Hopkins and Pendell ferries. Livestock thieves and bootleggers are also mentioned in the popular accounts. The ferry was operating when automobiles came to the region. Frank Cotter, in an effort to profit from this traffic, put up signs advertising the ferry along the road to Wilbur, and took out ads in a newspaper describing it as "the shortest route from Okanogan to Spokane" (Ruby and Brown 1974:135). Nevertheless, as new roads were built and trade patterns in the Big Bend region changed, automobile traffic tended to bypass the ferry more and more. When the barge sank, in either 1929 or 1931 (Weber and Wyborney 1970; Ruby and Brown 1974:149), it was not salvaged and so the ferry business ended at Condon's settlement. The overhead cable, however, spanned the river until it snapped in the great flood of 1948 The trading post buildings survived until 1953 when they were torn down and salvaged by Fred and Harold Weber, and then set on fire in compliance with a "clearing operation" for the Rufus Woods Lake Reservoir.

The Condon Ferry archaeological complex is located in both Douglas and Okanogan counties (Figure 7-2). The ferry structures on the Okanogan County side of the river (Section 9, Township 30 North, Range 28 East), are designated 45-OK-180H (the same site number as the Prather homestead discussed in Chapter 6). The site designations in Douglas County are 45-DO-202H for the trading post and 45-DO-203 for the ferry structures (Lyman 1976 , Munsell and Salo 1977). They are in Section 9, Township 30 North, Range 28 East. On both sides of the river, the ferry structures are between 950 to 1,000 ft above m.s.l. Site 45-OK-180H was found on the rolling hills which slope south

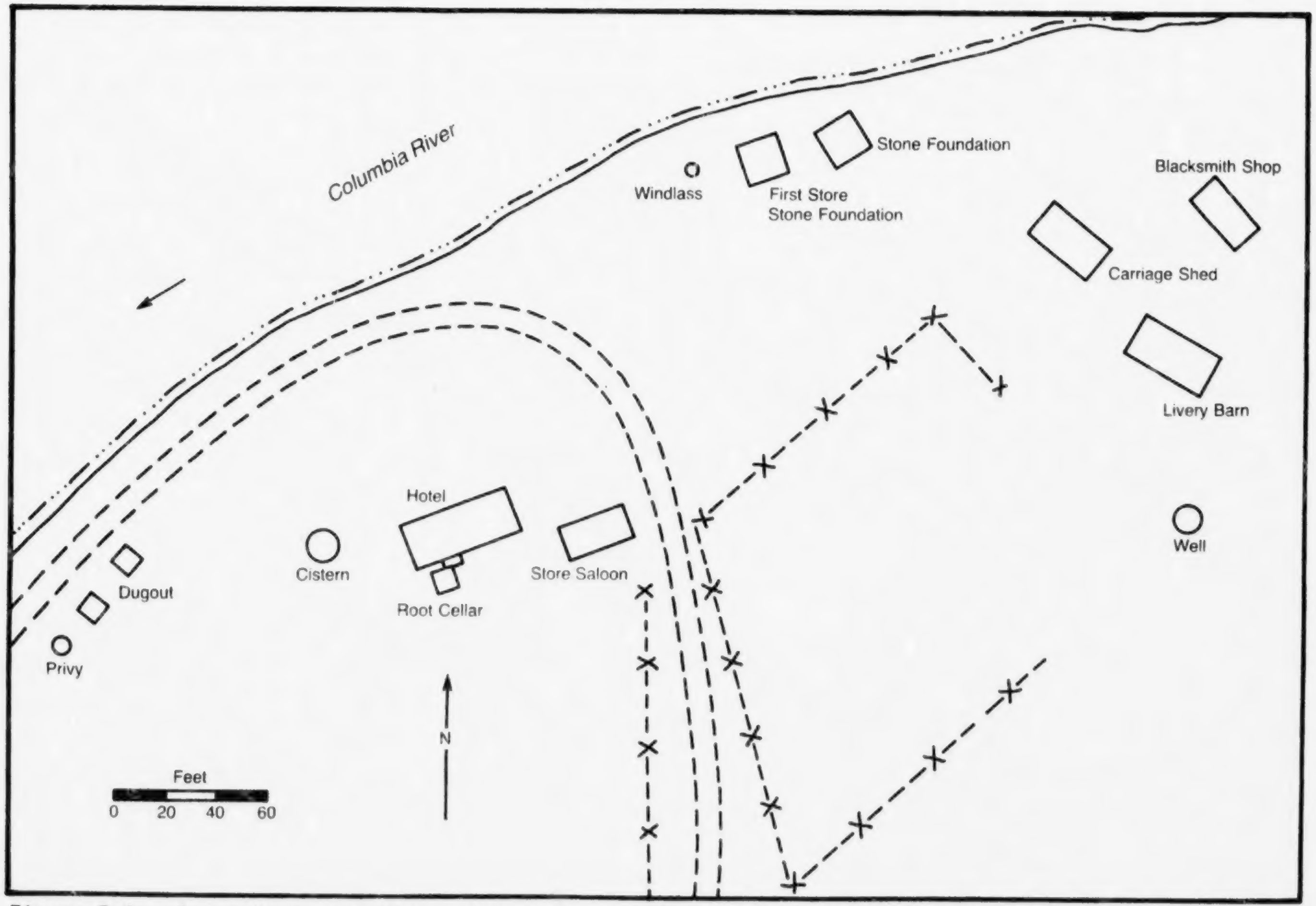
Columbia River
Windlass
First Store
Stone Foundation
Stone Foundation
Blacksmith Shop
Carriage Shed
Livery Barn
Well
Hotel
Store Saloon
Root Cellar
Cistern
Dugout
Privy
N
Feet
0
20
40
60

Figure 7-1. Approximate locations of buildings at Condon Ferry trading post (45-DO-202H) ca. 1890 (based on map of Fred and Harold Weber, ca. 1953). For legend, see Appendix B.

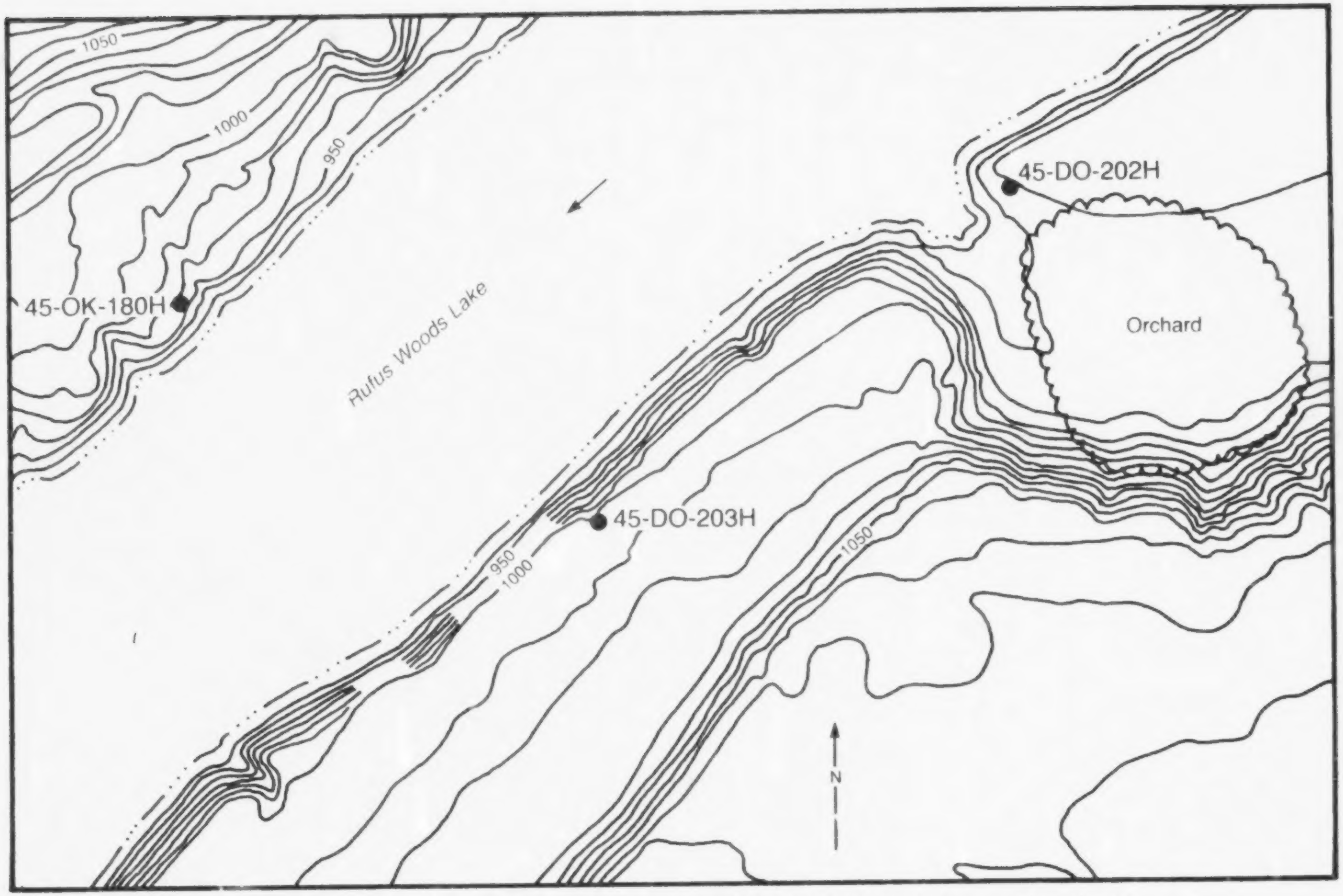
1050
1000
950
45-OK-180H
Rufus Woods Lake
45-DO-202H
Orchard
45-DO-203H
950
1000
1050
N

Figure 7-2. Location of the Condon Ferry trading post (45-DO-202H) and ferry structures (45-OK-180H and 45-DO-203H).

toward the beach, 250 ft downstream from RM 568 (Figure 1-1). Site 45-DO-203H is on a higher, flat terrace immediately behind and partially on the steep riverbank, about 1,150 ft upstream from RM 568 (Figure 1-1). Features associated with 45-DO-202H occur along a beach terrace and a low alluvial bar. Native vegetation, consisting of bitterbrush, sagebrush, salt grass and some cheat grass was noted on the sites, although the Douglas County sites have been more affected by cultivation and active cattle grazing.

Except for the trading post buildings, which had been demolished by the Weber brothers, the features at Condon Ferry were in excellent condition, suffering only from neglect. The locations, functions, and dimensions of the features identified during the historic survey are presented in Table 7-1. These are described by site in the following sections. As noted above, much has been published about the ferry complex; we have relied on these sources and testimony from the Weber brothers to reconstruct an image of it. Lyman (1976:32) illustrates a few of these features and the trading post buildings are shown in 1953 Corps "reservoir clearing" photographs (U.S. Army Corps of Engineers, Chief Joseph Dam Archives).

45-OK-180H

A variety of structures integral to the operation of the ferry were recorded at the north bank landing (45-OK-180H). The features include levelling posts and segments of road, but massive structures of rock and wood, used as dead weights and anchors for the cables and cable tower, predominate (Table 7-1, Figure 7-3).

The cable anchor (Feature 32), located on the hillside above the ferry road (Feature 26), was in fairly good condition. Inspection confirmed that it was an enormous rock cairn bounded by log cribbing, as the Webers (personal communication 1977) had described it. The logs, of peeled driftwood, were each about 1 ft in diameter. They were fastened at the corners by both square and saddle notching and again by twists of heavy gauge wire. The overhead cable was fed through a wooden trough in the center of the anchor and then wrapped around a horizontal log at the back and base of the anchor. Two vertical logs prevented the cable from slipping or moving from side to side, and two log knees in front of the structure prevented the weight of the cable from pulling it down the hill. Round nails were used throughout the construction.

The cable tower foundation (Feature 31), a stone cairn reinforced with driftwood log cribbing, was found at the edge of the riverbank. Apparently, the tower had stood for some time after the ferry was abandoned, but was finally destroyed in a grass fire (Fred and Harold Weber personal communication 1977). Described as a "quadrapod" built with logs placed at each corner of the foundation, the structure elevated the overhead cable from one anchor (Feature 32) to a height equivalent to its attachment on the other anchor (Feature 1) across the river. Such towers were a common feature of cable ferries and several types are illustrated in Ruby and Brown (1974:91, 102, 103, 109, 119, 141).

Table 7-1. Feature types and dimensions at 45-DO-202H, 45-DO-203H and 45-OK-180H.

Feature Location	Type	Dimensions (ft)
45-OK-180H		
26	Road	
29	Deadman	3.5 x 18
30	Deadman	12 x 23
31	Tower foundation	12 x 21 x 7
32	Cable anchor	17 x 22 x 7
33	Leveling post	1 (dia) x 4.8
34	Unidentified stone ring	3 x 4
45-DO-202H		
1	Weir box	5 x 6.7
2	Cellar	13 x 15 x 4.2
3	Foundation	1 x 16.4
4	Root cellar	16 x 22 x 6.5
5	Road	
6	Orchard reservoir	
45-DO-203H		
1	Cable anchor	12 x 30 x 3.5
2	Capstan	
3	Windlass	

Feature 33 was a simple structure very important to the ferry's operation. It was the leveling post, on which operators placed a level to make sure cable heights were the same on both sides of the river. If the heights differed, the crossing would be fast one way and slow the other; or, the ferry could stall in mid-river. The post itself was simply a log set vertically in the ground in line with the tower and anchors. An iron pintle hinge was found hanging from a round nail in the post, but it was doubtful if this was a functioning part of the leveling post.

Feature 34 directly behind the leveling post, was an oval-shaped ring of stones of various sizes, suggesting a post hole. If so, it may mark the location of a previous leveling post.

Features 29 and 30 were identified as "deadman" anchors for the ferry's wind cable and consequently were associated with Feature 3 at 45-DO-203H (Fred and Harold Weber, personal communication 1977). Both anchors were rectangular

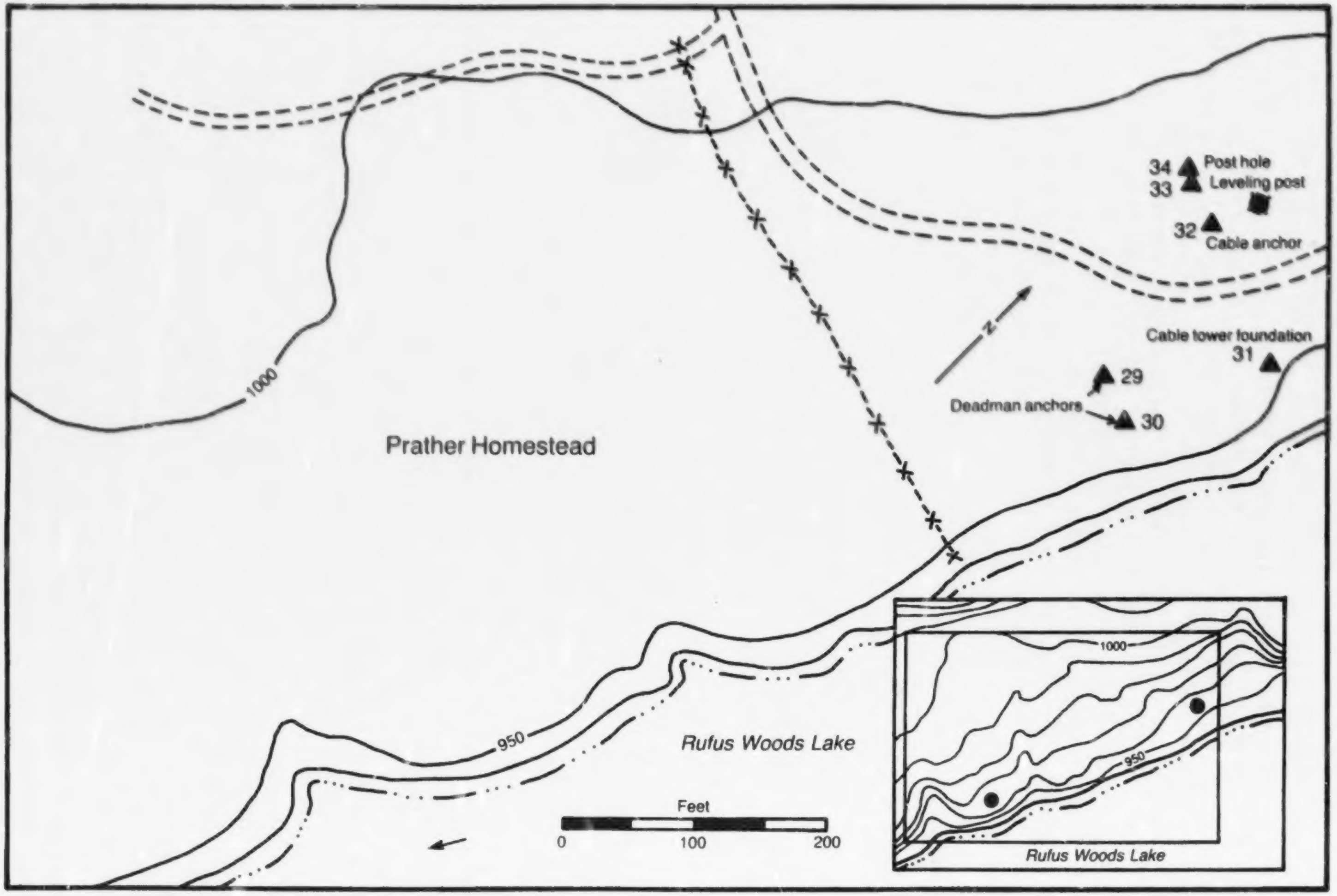
34 Post hole
33 Leveling post
32 Cable anchor
Cable tower foundation
31
N
29
Deadman anchors
30
1000
Prather Homestead
950
Rufus Woods Lake
Feet
0
100
200
1000
950
Rufus Woods Lake

Figure 7-3. Condon Ferry (45-DO-180H) and cultural features identified. For legend, see Appendix B.

trenches, parallel to the river and filled with angular stones. The trenches of Feature 30 held a horizontal log around which the cable probably had been wrapped. A fragment of 1/4 in cable was nearby. No log was found in Feature 29 suggesting that it may have been an earlier anchor replaced by Feature 30.

Feature 27 was the short dirt road that may have served as a log unloading ramp or alternate ferry landing (see Prather Homestead, Chapter 6). A second road section, Feature 26, was part of the dirt road from the landing north through Goose Flats. Its condition varied; in places it was quite distinct while in others it had eroded and was overgrown with vegetation. Generally about 10-ft wide, the road broadened at curves and where the topography allowed. No signs of the road or ferry landing remained on the riverbank and beach. This was hardly surprising since the location of the landing site and the roads leading to it would have varied from season to season depending on the river's height.

45-DO-203H

The few features recorded at 45-DO-203H the south bank landing (Figure 7-2) are all structures used to hold or maintain the cables. They include a capstan and a windlass, neither of which were found on the Okanogan County side. The wind cable anchor was constructed differently than its counterpart on the opposite bank.

Feature 1 was the anchor for the wind cable on the Douglas County side of the river. It was located at the edge of the riverbank and extended slightly over it. The structure was in excellent condition making its function readily apparent. The wind cable anchor had been built during Condit's time, and subsequent ferry tenders had maintained and, probably, enlarged it. It was set in an oval excavation perpendicular to the river that extended through the riverbank and was partially stabilized with rock. The anchor itself was well braced and balanced. At its center were two vertical logs about 1.5 ft in diameter which were capped by a lintel made of boards. These logs were braced on the river side by wooden knees and a horizontal log set against them and at one side of the excavation. Another horizontal log, around which the cable was wrapped, was placed on the back side near the bottom of the excavation. The cable was then threaded through the vertical logs and enclosed in a wooden chute to protect it from rust and dirt. The entire back section of the excavation was filled with vertical boards of various sizes which kept the foot of the anchor from slipping and had lifted the cable when the span across the river had sagged. The anchor, more like a machine than a dead weight, was constantly adjusted to keep the cable tuned, or level, for a successful crossing. Although much of the hardware associated with the anchor was hand forged, the functions of most of the pieces were not identified. We determined that round nails were used to construct the anchor. Half-inch and one inch steel cable was also used. The half-inch cable was probably associated with the capstan (Feature 2) and the larger diameter with the overhead cable. Sections of the latter had been cut and repaired with shackles. Fred and Harold Weber (personal communication 1977) recalled that the ferry had been sabatoged when it was owned by Julian Bryan; this probably accounts for that damage.

The ferry's sheaves were cast iron and had to be periodically greased to prevent wear and insure smooth crossings. A capstan (Feature 2), was used to pull in the cable sheaves for greasing. It was constructed of a 1-ft long vertical log that served as the drum upon which a cable was wound, a partially buried horizontal log that functioned as a seat for the drum, and a pole about 18 ft long that was used to turn the drum. Several board cleats were fastened to the short log to increase its diameter that the cable and sheaves could be reeled in more quickly and efficiently. A riskier method of greasing involved sending a man or a boy in a cart along the cable to meet the sheaves overhead (Ruby and Brown 1974:15).

Feature 3 was the remnant of a wind cable anchor and windlass. It was located about 50 ft downstream from Features 1 and 2 on the same terrace. It was in very poor condition and had either collapsed or been vandalized; only scattered cobbles and hewn logs and poles were noted. The cobbles may have been an anchor and the timbers part of the windlass. The windlass would have helped prevent the ferry from twisting in the current and snapping its leads from the overhead cable. The Webers also recalled that this had been the location of the first telephone line to cross the river bringing service to the Condon Ferry hotel.

45-DO-202H

The commercial complex associated with Condon Ferry, referred to here as the trading post, has been described above. Because of the demolition of the buildings, cobble alignments and depresssions were the only surface remains of the trading post buildings. With the aid of Fred Weber, a current owner of the property and familiar with the ferry during the years it was in operation, six features were identified during the survey (Figure 7-4): weir box (Feature 1), saloon cellar floor (Feature 2), hotel foundation (Feature 3), root cellar (Feature 4), road (Feature 5), orchard reservoir (Feature 6). Other evidence of the trading post occupation was abundant. Artifactual debris--nails, brick, scrap metal and bottle glass--littered the surface. Potholes and other small excavations also suggest the site has been collected by amateurs. The owners of the site possess a collection that includes the balance scale used by Bill Condit in the store (Bicentennial Association 1976:84).

Because of the lack of surface architectual information at this potentially significant site, subsurface excavations were conducted. Eight 2 x 2-m units and two 1 x 1 m-units were excavated. They were placed to sample the subsurface evidence of the hotel, saloon or store, saloon cellar, and root cellar (Figure 7-5). Other units were located between the reported location of the hotel and the saloon cellar, and in front of the hotel. Four subsurface cultural features were identified in excavation: root cellar floor (Feature 7), saloon cellar (Feature 8), saloon or store structure (Feature 9), and hotel's southern wall (Feature 10).

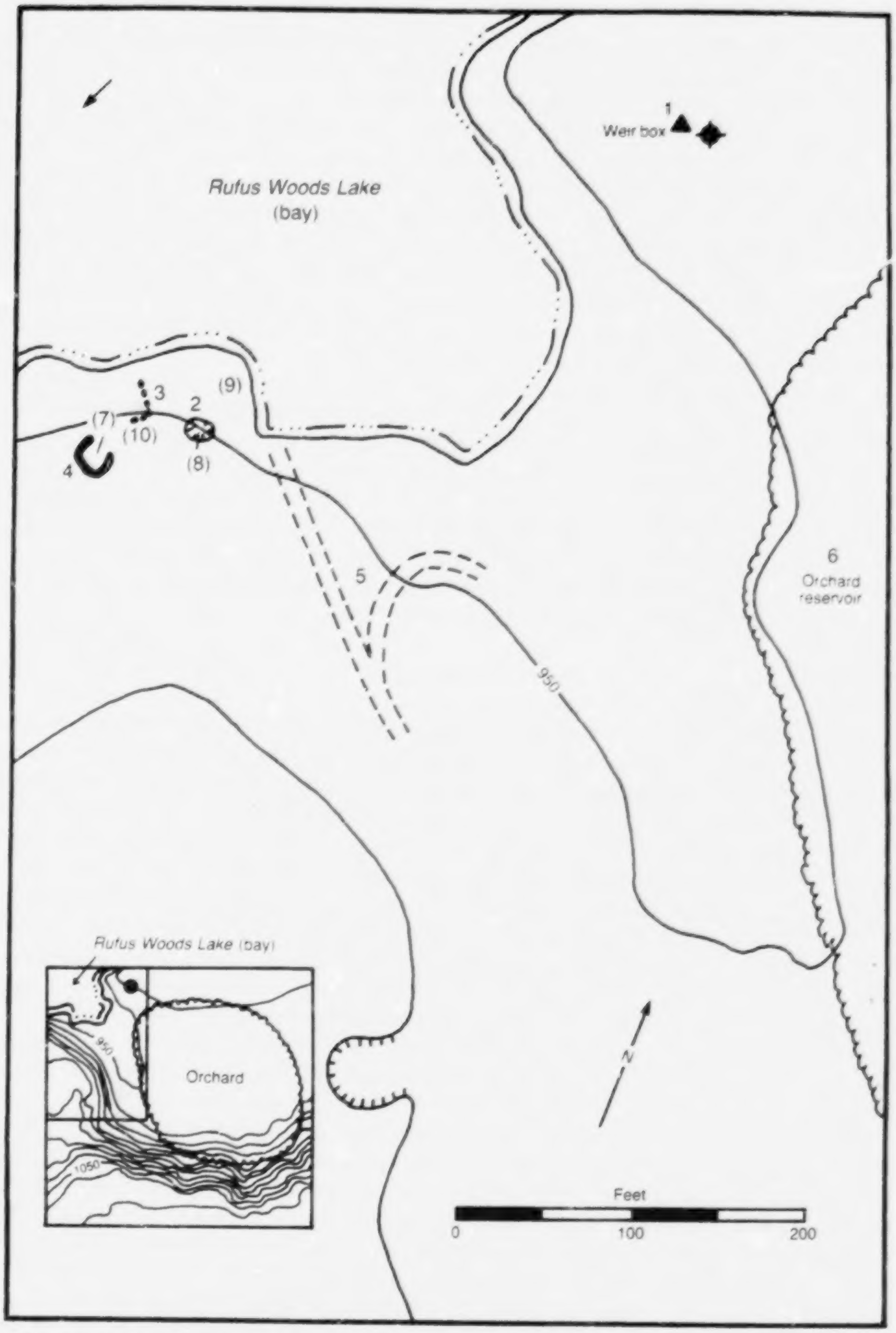
Rufus Woods Lake
(bay)
1
Weir box
(9)
3
2
(7)
(10)
4
(8)
5
6
Orchard
reservoir
950
Rufus Woods Lake (bay)
950
Orchard
1050
N
Feet
0
100
200

Figure 7-4. Condon Ferry trading post (45-DO-202H) and cultural features identified. For legend, see Appendix B.

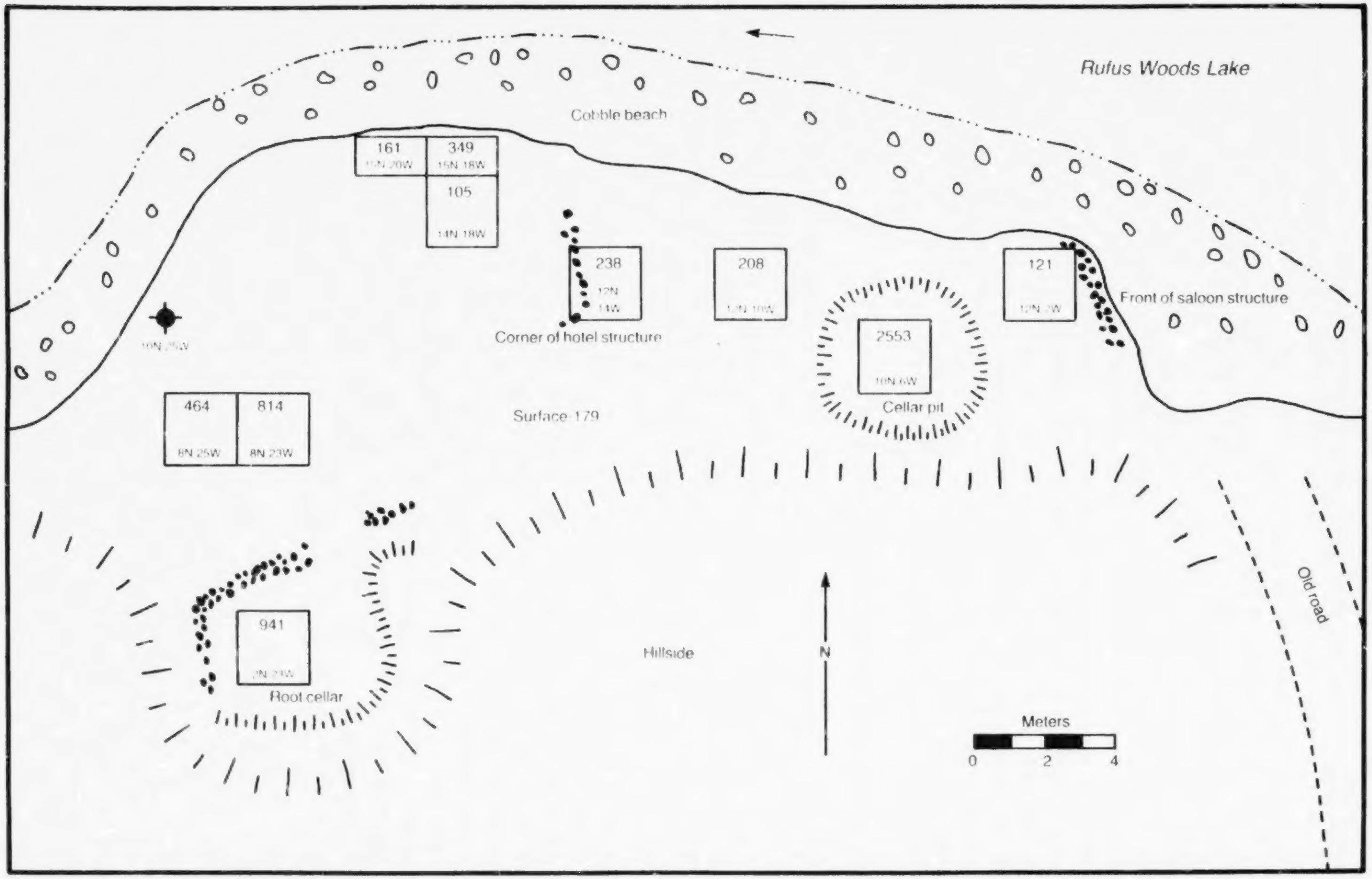
Rufus Woods Lake
Cobble beach
161
15N 20W
349
15N 18W
105
14N 18W
238
12N
14W
Corner of hotel structure
208
12N 10W
2553
10N 6W
Cellar pit
121
12N 2W
Front of saloon structure
10N 25W
464
8N 25W
814
8N 23W
Surface 179
941
Root cellar
Hillside
N
Meters
0
2
4
Old road

Figure 7-5. Excavation units and distribution of artifacts at Condon Ferry trading post (45-DO-202H). Numbers in pits are artifact counts. For legend, see Appendix B.

Excavation techniques have been described in Chapter 2. With the exception of the root cellar and the saloon cellar, units were excavated in 10 cm levels following natural contours. A thin sod stratum, no deeper than 4 cm, contained a number of artifacts. This was underlain by a dark brown silty sand stratum between 2-10 cm in depth, which contained most of the cultural material recovered. Excavation was terminated at a sterile gray clay which occasionally included cultural material embedded from the stratum above. The root cellar and saloon cellar units were composed primarily of fill layers and were excavated by 10 cm intervals. Both terminated in the same sterile gray clay present over the remainder of the site. Deviations from this stratigraphic sequence are described in the summary of each test unit.

The surface remains and subsurface investigations are described below by building or structure. The artifact assemblages are briefly mentioned, especially as they pertain to the function, time span of use, and post-abandonment history of each feature. A detailed inventory by type of the more than 5,000 artifacts is presented as a final section.

Hotel Foundation and Southern Wall--Features 3 and 10

The hotel at Condon Ferry, built ca. 1890, was one of the standing structures burned in 1953. It was constructed of sawn lumber from Spokane that was rafted down the Columbia River from Peach. It was framed with 2 x 6-in studs, covered with board and batten; it had a shingled gable roof. The carpenter, a Norwegian named Jergensen from Wilbur, reportedly used wooden pegs for joining and square nails throughout the remainder of the building (Weber 1977:n.p.). One source (Weber and Wyborney 1970:5) notes the hotel measured 30 x 18 ft, while Weber (1977:n.p.) reports it measured 36 x 18 ft. The hotel faced the Columbia and had doors on the east and south sides. A door in back led from the walk to the root cellar. The hotel was one and one-half stories high, with a big front room, combined dining room and kitchen on the main floor, closets under the stairs, and two bedrooms upstairs, used primarily by women travelers. The men slept in the barn with the horses (Weber 1977:n.p.). Although it lacked a fireplace, the hotel did have a big cookstove with a chimney of handmade bricks. Fred Weber reports that sometime in the teens or early twenties, a wainscoting, fastened with wire nails, was added to the outside of the structure (personal communication 1983).

In its heyday, the hotel served meals for 50 cents (Victor 1967:13), provided a rest stop for miners passing through, and occasionally a night's stopover. It also housed the Condon post office, established there on February 11, 1889 (Weber and Wyborney 1970:7). Mail came twice weekly from Hesseltine near Wilbur until May 28, 1895, when the post office closed (Ramsey 1973:9). In 1897, the hotel housed the first school in the area. Ten or 12 students attended the school (Victor 1967:14) until 1900, when a log cabin school was built downriver from Condon Ferry (Weber and Wyborney 1970:10).

By 1906, miners did not cross the river to reach Conconully or Ruby anymore, although an occasional traveller or rancher moving livestock passed through. After the hotel closed it was not abandoned. Fred Weber, born in 1908, recalls boarding there as a youth (personal communication 1983).

Automobiles began using the ferry around 1911 and continued to do so until it shut down in 1929.

We investigated six units in the hotel structure. Two of them were 2 x 2-m adjacent units (8N23W, 8N25W) placed in an area identified by Fred Weber as the southern wall of the hotel (Feature 10) in the vicinity of a short walkway that once led to the root cellar; one 2 x 2-m unit (12N14W) located 6 m north and east of 8N23W, identified as the corner of the hotel structure (Feature 3); and, one 2 x 2-m unit and two 1 x 1-m units also located on the riverbank.

A large amount of artifactual debris was found on the surface of units 8N23W and 8N25W, placed in front of the entrance to the root cellar. The cultural layer consisted of a brown silty sand occurring from the surface to a depth of 4-6 cm, overlying a sterile gray clay. The artifacts here bore abundant evidence of the 1953 burning. Glass objects were fused together or melted and other artifacts were burned. Orange-stained soil and charcoal staining was present in 8N25W. The trampling of cattle had disturbed Unit 8N23W, but the northern quads still held evidence of burning. In 8N25W, charred wooden planks rested on the clay matrix at the base of the cultural horizon, in association with pulverized burned brick in the northeast quad.

The artifacts from these two units are summarized in Table 7-2. Although well over half the bottle glass fragments recovered from the site come from these two units, no complete vessels were identified. Several ceramic fragments were also recovered in addition to square and wire nails, wire staples, a tire valve cap, and several rods from electrical insulators. Two components of a door knob assembly were recovered from the southeast quad of 8N23W.

The wooden planks are the only structural evidence of the hotel's southern wall. The brick fragments may indicate where the chimney of the cookstove stood, suggesting the kitchen was at the west end of the building. The door knob assembly may be from the back door of the hotel.

The feature identified as the corner of the hotel structure (Feature 3) was a cobble alignment 4 m long and oriented northwest/southeast. The cobble alignment jogged southwest and continued for 2 m. The granite and basalt cobbles were set in a single line, one in front of the other. Handmade common bricks (2 1/2 x 4 x 8 1/2 in), found in the vicinity of the foundation, were probably from the hotel stove chimney. A 2 x 2 m unit (12N14W) was placed adjacent to and slightly overlapping the cobble alignment to sample the area under the corner and under the porch.

The unit sloped higher in the southwest corner, an area which would have been inside the hotel foundation. Cattle had trampled the northern two quads. In the southwest corner, a thin sod zone was followed by a light brown silty sand overlying the cultural horizon, composed of a slightly darker yellow brown silty sand. Both this quad and the southeast quad with its charcoal staining and charcoal fragments bore evidence of the 1953 burning. Cultural debris, more abundant in the southwest quad than the southeast, included a quantity of glass fragments, metal scrap, baling wire, ceramic fragments and a cartridge shell (Table 7-2). The cultural horizon ended about 20 cm below the surface in the southwest corner.

Table 7-2. Artifacts from features, Condon Ferry, 45-DO-202H.

Artifact Type**	Root Cellar (Feature 4)	Root Cellar Floor (Feature 7)	Saloon (Feature 9)	Saloon Cellar (Feature 2)	Saloon Cellar Floor (Feature 8)	Hotel's Southern Wall (Feature 10)	Hotel's Foundation (Feature 3)
Bottle & Vessel Glass							
General bottles							
Clear	1	2	1	1 (1904-+)	1 (1904-+)	2	1
	1 (1904-?)	1 (1904-?)		1			1*
Amber	2	1	1	2	1	1	1
	1 (1880-1900)						
Dark amber	1	1		1		1	
Light amber						1	1*
Aqua	1				1		1
Dark green							1
Light green	1	1		1	1	1	1
				1 (1904-?)			
Olive green	1	1		1		1	1
Dark olive green	1 (1880-1910)						
Light olive green							1*
Yellow green				1			
Light orange				1			
Brown							1
Yellow brown							1
Amethyst	1 (1904-1917)			1 (1885-1917)			1(1885-1917)
Alcoholic beverage							
Amber				1 (1881-1905)			
Aqua						1 (1904+)	
Beer							
Yellow green					2 (1904-?)		
Amber					1 (1904-+)		
					1 (1917)		
Dark aqua					1		
Soft drink							
Green					1 (1904+)		
Light green					1 (1904+)		
Medicine							
Clear				1 (1904-1930)			
Canning jars							
Light green	1 (1930-1940)			1			
Clear					1 (1920)		
Aqua					1		

* Artifacts from under structure, southwest corner of unit.

** Counts represent number of items found or, in the case of sherds, minimum number of vessels per artifact type.

*** No count.

Table 7-2. Cont'd.

Artifact Type**	Root Cellar (Feature 4)	Root Cellar Floor (Feature 7)	Saloon (Feature 9)	Saloon Cellar (Feature 2)	Saloon Cellar Floor (Feature 8)	Hotel's Southern Wall (Feature 10)	Hotel's Foundation (Feature 3)
Bottle & Vessel Glass							
General Vessel Glass							
Amethyst	1 (1885-1917)			1 (1885-1917)			
Tumbler amethyst	2 (1885-1917)						
Milk glass, jar	1					1	
Funnel	1						
Chimney glass				1			1*
Clear jar							1
Milk jar							1
Window glass	1		1			2	
Window glass with caulking					1		
Pastewares							
Ceramics					1 (1891+)		
Earthenware							
Unidentified ceramic	3	1		2		2 ***	2
Bowl				1			
Plate	1						
Stoneware				1			
Crock						1	
Porcelain							1
Insulators (electric)	1			2		1	
Canning jar liner					1	1 (1915+)	
Metal							
Nails							
Wire	51	25	64	798	48	231	43/10*
Square	9	3	38	155	24	123	30/12*
Tin cans							
Unidentified	1 (1880-1910)		1	2 (1910-?)	2 (1910+)	1	2 (1910-?)
	1 (1910-?)						
	1						
Open top		1					
		3 (1910-?)					
Sardine		1		2 (1910-?)			
Resealable		1		1	1		
Milk	2 (?-1931)			2 (?-1931)			
Tagger	1			1			
Tobacco	2				1		

* Artifacts from under structure, southwest corner of unit.

** Counts represent number of items found or, in the case of shards, minimum number of vessels per artifact type.

*** No count.

Table 7-2. Cont'd.

Artifact Type**	Root Cellar (Feature 4)	Root Cellar Floor (Feature 7)	Saloon (Feature 9)	Saloon Cellar (Feature 2)	Saloon Cellar Floor (Feature 8)	Hotel's Southern Wall (Feature 10)	Hotel's Foundation (Feature 3)
Metal							
Cartridges			1	1 (1876-1935) 2	2 (1885-1917)	1	1 (1857-?) 2*(1885-1917) 1 (1877-present)
Shotgun			1				
Miscellaneous Metal							
Staples							
Square				1	1		
Wrought iron					1	1	
Wire				2		2	
Nuts				1	1		
Wing					1		
Bolts					1	3	
Washers					1		
Screws							1
Wire			1	1	1	1	1*
Twisted				1	1		
Barbed				1			
Pipe with fitting				1			
Chain					1		
Chain links					1		1
Spring				3			
Scrap metal			1				
Strap metal		1					
Sheet metal				1			
Harness ring		1					
Harness buckle					1		
Harness bolt snap							1*
Machinery parts							1
Machinery knob					1		
Machinery rod					1		
Doorknob assembly						1	
Handle/pull				1			
Bracket					1		
Grommets				1			
Shoelace grommet			1				
Copper grommet				2			
Car battery				1	1 (1911+)		

* Artifacts from under structure, southwest corner of unit.

** Counts represent number of items found or, in the case of sherds, minimum number of vessels per artifact type.

*** No count.

Table 7-2. Cont'd.

Artifact Type**	Root Cellar (Feature 4)	Root Cellar Floor (Feature 7)	Saloon (Feature 9)	Saloon Cellar (Feature 2)	Saloon Cellar Floor (Feature 8)	Hotel's Southern Wall (Feature 10)	Hotel's Foundation (Feature 3)
Miscellaneous Metal							
Tire valve cap						1	
Crown bottle cap	1 (1895-present)	4 (1895-present)					1 (1895-present)
Tin can key opener				1			
Canning lid (zinc)					2		
Canning jar liner					1		
Aluminum stove part						1	
Stove burner				2			
Steering wheel for toy car							1*
Ruler							1
Straight pin							1
Eyehook				1			
Privy box				2			
Hose clamp				2			
Shovel blade				1			
Barrel hoop				3			
Hayrack				1			
Pail				1			
Call bell				1			
Dinner knife					1		
Buttons							
Shell					5	1	
Metal					1		
Miscellaneous							
Rubber gasket for canning jar	2				2		
Rubber-backed canvas					1		
Leather strap					2		
Leather harness strap				2			
Barrel					1		
Barrel/keg					1		
Enamel bowl/dish						1	
Newspaper		1					
Shoe				2			
Brick				1			
Plaster	1						
Chalk	1						
Caulking				***			
Cork				1			

* Artifacts from under structure, southwest corner of unit.

** Counts represent number of items found or, in the case of shards, minimum number of vessels per artifact type.

*** No count.

The cultural horizon continued at the same level in the northern quads, but the matrix was a yellow brown medium coarse sand with rounded pebbles. Charcoal staining and a greater concentration of artifactual debris characterized the matrix. The recovered artifact assemblage includes square and wire nails, a crown bottle cap, cut bone, chain links, two latch parts, two cartridge shells and a straight pin.

Although the cobble alignment is the sole structural evidence of the hotel corner, the soil matrix in the southwest corner (west of the cobble alignment) differs from that of the rest of the site. This indicates that the cobble alignment was an **in situ** foundation component, and the area in the southwest corner of the unit was likely underneath the structure. The two door latch pieces suggest that there was indeed a door on the east end of the hotel; the square and wire nails indicate that, although the hotel was originally built with square nails, modifications were made with wire nails. Nothing else from the unit indicated the structure of a porch, although small artifacts, like the straight pins or bottle caps, could have fallen through floorboards or been swept under a porch.

Two 1 x 1-m units (15N18W, 15N20W), contiguous and parallel to the riverbank, and one 2 x 2-m unit (14N18W) adjacent to the south wall of the easternmost 1 x 1-m unit (15N18W) were excavated in search of additional evidence of structural remains of the hotel (Figure 7-5).

Unit 14N18W was opened to sample under the hotel but it revealed little more than evidence of the structure's razing. Orange soil and charcoal staining just below the surface in the southwest and northwest quads were the only distinctive features. This cultural horizon ended less than 10 cm below the surface, on a gravelly silty sand. From it, excavators recovered a familiar array of artifacts--numerous wire and square nails and fragments of glass and ceramics. A row of five cobbles just below the surface in the northwest corner of the unit aligned east/west was the only indication of structural remains.

To recover more of the cobble alignment and ceramic concentration, adjacent unit 15N18W was opened. The burned soil from the 1953 razing was 8 cm below the surface; it yielded nails, ceramics, glass, and a whetstone, but no other evidence of structural remains. There were a number of cobbles, but they were not arranged in any pattern.

Unit 15N20W was excavated next in search of foundations or other structural remains. The burned cultural horizon was encountered at about 8 cm below surface in the southern portion, rising to just below the surface in the northern portion. Again, only a few large cobbles were found. Scattered concentrations of square and wire nails and glass fragments were found but in smaller numbers than in previous units.

In spite of the excavation of several units, we uncovered little data about the hotel. The only **in situ** structural remains identified were the cobble alignment delineating the hotel porch. Other structural remains--a plank recovered from 8N25W and a row of cobbles identified in 14N18W--are evidence of the structure's existence, but we cannot be sure of their original position. If the hotel was 30 or 36 ft long, excavators should have encountered structural remains in 8N25W or 8N23W. That they did not suggests that the destruction of the hotel was nearly complete. We can therefore only make tentative inferences from the artifact inventory--the abundance of wire nails suggests frequent repair work on the hotel and the artifact types and chronology are consistent with the documentary evidence that the hotel was in use between 1885 and 1930.

One 2 x 2-m unit (12N10W) was located between the corner of the hotel structure and the saloon cellar. It contained surface material but few artifacts were found below the surface, suggesting that the site had been disturbed and the artifacts relocated. A thin scatter of cultural materials, including bottle glass, ceramic fragments, an overall button and wire staples was distributed over culturally sterile, pebbly silty sand, associated with a milled plank and square and wire nails. A few fragments of charcoal were found but the unit did not show as much evidence of burning as units with structural remains.

Root Cellar--Features 4 and 7

The root cellar was built at the same time as the hotel, and completed by 1890. Dug into the bank behind the hotel, it was connected by a breezeway to the hotel's back door. The root cellar measured roughly 10 x 12 ft. River cobbles lined the north, or front, wall; logs lined the sides and back wall. Also constructed of logs, the gable roof was supported by a big ridgepole in the center and covered with a layer of earth 18 in to 2 ft deep. The root cellar was constructed to maintain a constant temperature of 45°F. Like other frostproof root cellars in the region, it had an outside door which opened onto steep, narrow stairs leading down to a second, heavier cellar door. This kept air intake and circulation to a minimum, thus preventing root crops from freezing. A dirt floor also helped preserve goods stored in the cellar. No evidence of the breezeway remained.

A squarish depression (Feature 4) located in the curve of a small hill facing the Columbia River roughly 11 m southwest of the hotel structure was identified as the remains of the root cellar by Fred Weber. A line of cobbles runs north and south for 3 m on the west side of the depression, then jogs northeast, continues for 4 m, is interrupted for 2 m and continues again for 1.75 m. A 2 x 2-m unit (2N23W) was placed in the depression.

The upper 20 cm of the unit consisted of loose fill containing numerous cobbles, and a few wire nails and glass sherds. Between 20 and 60 cm in depth was more fill with intermittent orange staining, charcoal, burned timbers and a small number of artifacts, including wire and square nails, bottle glass and window glass. Between 60 and 75 cm in depth was a mottled clay matrix which contained one plank and artifacts similar to those above--wire nails, bottle glass, and window glass. The root cellar floor, Feature 7 was encountered at 75 cm below the surface. It consisted of a hard-packed clay with dense organic staining. The soil of the floor was marked by rusting metal, particularly tin cans. Bottle glass, a complete bottle, and a newspaper were also found on the floor, and rodent bones in the southeast corner. The floor was approximately 5 cm thick, except in the western half of the unit, where an oval pit, measuring 1.25 m across and .25 m deep was uncovered. The clayey soil matrix of the pit contained two glass fragments and two peach pits.

The artifacts from the root cellar floor (Table 7-2) indicate it remained in use from the time of its construction in 1890 until at least 1910, and probably later. Fred Weber (personal communication 1982) speculated that the root cellar was used until 1929 when the ferry was discontinued. That no traces of artifacts such as canning jars and stoneware crocks remained suggests that the root cellar was cleaned out before it was abandoned and became a randomly used trash dump, and, possibly, a pack rat den. Only the newspaper fragment, possibly used to wrap fruit, is the only artifact that may document the original use of the root cellar. The function of the oval pit is unknown.

The earthen roof of the root cellar had probably collapsed before the burning of the structures in 1953. The planks and timbers are likely roof beams charred in the burning and partially covered by cobbles lining the front wall of the cellar. The artifacts in Feature 4 (Table 7-2) may have been trash dumped in the cellar and/or dropped on the roof before its collapse. To acquire their color, the pieces of amethyst-colored glass must have been exposed to the sun for some time before they were buried in the fill of the root cellar.

Saloon and Saloon Cellar--Features 2, 8, and 9

Built about 1890, the same time as the hotel, the saloon and store (Feature 9) was the second business establishment erected at the site. Like the hotel, it was constructed of sawn lumber with 2 x 6-in studs and a board and batten exterior (Weber 1977:3). The one-story frame building measured 12 x 18 ft and faced the Columbia. It had a shingled gable roof and one big room with a door at its east end. The building was a social center, where dances were held and thirsts quenched (Weber and Wyborney 1970:10). The liquor, primarily whiskey, was hauled in by the barrel and sold by the bottle. Fred Weber (personal communication 1983) has also found two billiard balls nearby, suggesting the saloon had a billiard table. Weber and Wyborney (1970:10) report the saloon closed in 1896, but the store operated until 1906. The ferry community mainly served passersby. Most of the families living near Condon Ferry bought their supplies from Sprague, Wilbur or Coulee City, and only occasionally from the store at Condon Ferry.

A cobble alignment nearly 4 m long running in a northwest/southeast direction along the old road was identified by Fred Weber as a support for the saloon or store porch which had been at the front of the building. A 2 x 2-m unit (12N2W) was placed west of the alignment, presumably under the porch. Underneath the sod, a thin cultural zone, consisting of a dark brown silty sand with little or no gravels, occurred to a depth of 1-3 cm. In the southern quads, this matrix held an abundance of charred wood fragments and charcoal staining. Below 3 cm was a sterile, yellow brown, fine silty sand. This matrix continued to the termination of the unit at a depth of 10 cm.

The charred wood and charcoal staining documents the burning of the site during the Corps of Engineers clearing operations. The artifacts found in the cultural stratum (Table 7-2) do not relate specifically to activities associated with a saloon or store. The square nails would have been used to construct the building and the wire nails may have been used then or in later modification; the cartridges were probably discarded after the building's occupation; the other artifacts are probably debris accumulated about the structure.

Located under the back end of the saloon was a rectangular cellar used to keep items cool. Only 5 ft deep, it had no steps, and was reached by a trap door in the saloon floor. According to Fred Weber (personal communication 1983), the cellar was dirt-lined and 4 x 6 ft in size.

A rectangular depression roughly 4.5 m across and 1 m deep was identified as the saloon cellar (Feature 2). A 2 x 2-m unit (10N6W) was placed in the center of this depression. River cobbles and fragments of brick littered the surface. Below that, the fill matrix held a number of artifacts--bottle glass, wire, square and wire nails, window glass and leather fragments. These artifacts were probably deposited after 1953 because they occurred above an orange stained fill matrix with blackened wood, charcoal fragments and the artifacts listed in Table 7-2.

Beneath the 1953 stratum and above Feature 8 was another 20-30 cm of fill with a lower density of artifacts, including square and wire nails, scrap metal and unidentified metal and wood planks. The artifact density increased near the floor of the cellar.

Feature 8, the saloon cellar floor, a compact gray clay, contained a large artifact assemblage (Table 7-2) on top of horizontal wooden planks. In the general debris was a row of beer and soft drink bottles with their necks oriented in a northwest direction, suggesting they fell with the shelf supporting them. No artifacts were found under the wooden planks.

The barrel and the soft drink and beer bottles are debris appropriate to that supposed function of the cellar as a temporary cooling place for bottled beverages or other items sold in the saloon. The date range of the bottles, ca. 1904-1930, indicates the cellar, at least, was used until the ferry closed down. As noted above, the wooden planks were probably shelves lining the cellar rather than the remnants of a wooden floor. A wooden floor would not have kept items as cool as a dirt floor. Sometime later, perhaps with the change of owners in 1925 or with the termination of the ferry run in 1929, the cellar became a convenient place for dumping debris. The bulky artifacts in the upper fill suggest dumping during or after the 1953 clearing operations.

Feature 1--Weir Box and Feature 6--Orchard Reservoir

A fruit orchard was planted by Condit and expanded by Julian Bryan in 1910 (Weber and Wyborney 1970). It covered about eight acres on the 950 ft terrace behind the trading post area, and included peach, plum, apricot, pear, and several varieties of apple trees (Fred and Harold Weber personal communication 1977). Several graves were supposed to be located in the orchard, but none were discovered during recent surveys of the area. A weir box and a reservoir found in the orchard area provide an indication of the irrigation methods used.

The weir box (Feature 1) was a rectangular masonry structure built in a subsurface excavation. It was constructed of hand-made bricks (2 x 4 x 8.5 in) laid in a common bond with concrete mortar. Originally, a one-cylinder kerosene motor pumped water through the weir box pipes. Later, a pump run by the river current replaced the motor. The weir was used to control flooding from the nearby bay of the Columbia. Water was diverted by the weir into a reservoir (Feature 6) which was dug into the hillside in front of the terrace. The water was then used to irrigate the orchard. Fred and Harold Weber recall that their father had dug the reservoir for Julian Bryan.

Road—Feature 5

Only one section of the road to the ferry (Feature 5) was found in the survey. Disturbances due to modern traffic and flooding by the reservoir had obliterated the remainder of the road. The preserved section was approximately 12 ft wide and 129 ft long; it was slightly U-shaped and had stone piles or curbs along the sides.

Excavators recovered 5,556 historic artifacts from the surface and subsurface investigation units associated with the Condon Ferry trading post (45-DO-202H). They are described in the following inventory by material type. Figure 7-5 shows the distribution of artifacts over the site, including the features of the saloon cellar floor (Feature 8) and the root cellar floor (Feature 7). Nearly half the artifact assemblage was recovered from the disturbed soil matrix of the saloon cellar fill. Another large percentage of the artifacts came from the root cellar; nearly half of these were recovered from its floor (Feature 7). North of the root cellar, two units (8N23W, 8N25W) reportedly along the southern wall of the hotel also contained a large number of artifacts. The smallest number was recovered from the porch area of the saloon/store structure (12N2W). The large number of artifacts in the cellars suggest that the depressions were used, in part, as post-occupation dumps for refuse collected at the site.

Once identified, the artifacts were assigned to gross categories of functional activities: domestic, agricultural, building, auto transportation and commercial. Table 7-3 lists the descriptive artifact types and their presumed functional categories. The building category, composed of artifacts used in construction, building maintenance and repair, accounted for a little over half (51.6%) of the artifacts. Domestic artifacts, the next largest category, included items of personal and household use and accounted for 45% of the artifact assemblage. Only 3.2% of the collection was assigned to the agricultural category. A very few items were included in auto transportation and only one in the commercial category. Some artifacts could have been assigned to more than one category, although percentages of any of the categories would not have altered much. Site disturbance was indicated since nearly all types of objects were present in every unit. Although artifacts date from 1880 to 1950 it is only bottle fragments that date before 1900; the remainder of the assemblage dates from 1905 to 1930.

Table 7-3. Descriptive artifact types from Condon Ferry, 45-DO-202H, assigned to functional categories.

Functional Category	Artifact Type	Number
Domestic	Bottles and bottle glass	1,212
	Tin can fragments	694
	Scrap fragments	340
	Ceramics	81
	Rubber fragments	20
	Stove parts	15
	Buttons	14
	Cartridges	14
	Rubber gasket fragments	14
	Wallpaper	11
	Leather shoe fragment	10
	Miscellaneous	74
	Total	2,499
Agricultural	Wire	64
	Pail fragments	54
	Chain links	29
	Machinery parts	9
	Leather strap fragments	9
	Hay rack fragments	3
	Miscellaneous	8
	Total	176
Building	Wire nails	1,817
	Square nails	671
	Window glass	286
	Electrical insulator parts	31
	Tacks	14
	Miscellaneous	52
	Total	2,872
Auto Transportation	Battery parts	5
	Hose clamps	2
	Tire valve	1
	Total	8
Commercial	Call bell fragment	1
	Total	1
TOTAL		5,556

BOTTLE AND VESSEL GLASS

The bottle and vessel glass collection from Condon Ferry (45-DO-202H) is made up of 11 complete bottles and jars and 1,208 fragments; primarily soda and liquor bottles and canning jars. The collection also includes a few medicine bottles. Bitters and condiment bottles were conspicuously absent. While the relatively small size of our collection does not permit us to make inferences about the social implications of bottled products used in the project area, we can make a few observations.

The bottle and other vessel glass fragments recovered reflect Condon Ferry's function as a waystation for travellers. Liquor bottles are most numerous and their class is dominated by aqua, green and amber beer bottles. A few similarly colored bottles contained soft drinks. Clear bottles also contained soft drinks. Most identifiable beer bottles were manufactured after 1904. Except for one imported bottle, the beer bottles that could be identified were manufactured in Illinois and Ohio. Most of them were sealed with a crown cap; a small group had cork closures. A few wine bottles date before 1904.

Although whiskey was reportedly one of Condon's favored commodities (Bicentennial Association 1976:314), there is little trace of its use in our collection; and, no other distilled beverages were identified. Guy Victor, who lived above Condon Ferry in the 1890s, may explain this in his comments about the hotel. He reports that "whiskey was freighted in, mostly in barrels, and was sold at the hotel and store by the bottle. . . .Nobody thought much of beer drinkers" (Victor 1967:13). Condit was also reported to have watered down the whiskey 50% (Bicentennial Association 1976:314) before bottling. What containers were used for bottling is uncertain. One specimen in our collection indicates recycling, but postdates 1900, and was more likely used during Prohibition (1920-1933), when moonshine was bottled in any available containers. The abundance of beer bottles dating after 1904 would seem to indicate that beer drinking became more popular after 1900.

The few medicine bottles represented in our collection include a nearly full bottle of distemper medicine and a tonic for nose and throat inflammations. Mrs. Charlie Trefry, who lived near the project area in the early 1900s, states that "people usually stocked up a few drugs and were thankful if they only kept well" (Bicentennial Association 1976:113). Home remedies may also have accounted for the lack of medicine bottles.

Canning jars in shades of aqua, green and clear are well represented in our collection. However, most postdate 1904. With no refrigeration in the area, home canning was certainly a necessity. "The settlers set out orchards and berries any place they had water. They raised lots of garden [produce], canned fruit and vegetables. . .cured their pork and beef and canned the surplus" (Bicentennial Association 1976:114). Condit planted a small orchard after 1890 (Lyman 1975:31) but there is no other historic documentation that he grew or canned produce. A later owner of Condon Ferry, Julian Bryan, expanded the orchard in 1901 (Weber and Wyborney 1970:10) to include plums, peaches and apples. Fred Weber (personal communication 1983) commented that

Bryan and others had to raise crops in order to feed travellers stopping at the hotel.

All the bottle and vessel glass was recovered from the vicinity of the hotel, the root cellar floor, the saloon cellar and root cellar fill, and the saloon cellar floor. Most of the complete bottles collected were located on the floor of the saloon cellar. The following inventory includes a more detailed account of the bottle and vessel glass collection.

Alcoholic Beverage Containers

Six types of alcoholic beverage containers were identified at the site. The first type is represented by two yellow-green beer bottles (Figure 7-6). They were made by an automatic bottle machine and have slightly bulbous necks, a round body, a crown lip and an irregular, pronounced suction cutoff scar. Both have small bubbles and tears. One has a basemark of "8," and the other a basemark of "1." The latter has a slightly asymmetrical neck. Both bottles were recovered from the floor of the saloon cellar (Feature 8).

A second type of container is represented by a dark amber beer bottle with a post bottom mold blown by an automatic bottle machine. The bottle has a round body, a slightly bulbous neck, a crown lip, and an uneven, pronounced suction cutoff scar with a basemark of "2." It was recovered from the saloon cellar floor (Feature 8).

A third type is represented by a single amber beer bottle, sidemark "-Hoster-Columbus" (Figure 7-7); it was made by an automatic bottle machine. The bottle has a round body, a slightly blubous neck, a crown lip, a post bottom mold and a suction cutoff scar spreading over its heel. A second sidemark of "17N 5" is located on the back of the bottle. Adams et al. (1975:31) postulate that the sidemark designates the year of manufacture, plant and machine number. This bottle was manufactured in 1917 by Hoster, a company in Columbus, Ohio, which made Weiner beer (Kovel and Kovel 1982:28). It was recovered from the saloon cellar floor.

Several aqua fragments of a beer bottle represent a fourth type. The original bottle was made by an automatic bottle machine, has a round body, a crown lip, and a post bottom molded base with an irregular suction cutoff scar. It carries a basemark of "1." The bottle was recovered north of the root cellar in the vicinity of the hotel.

One dark olive green wine bottle fragment that includes the heel represents a fifth type. Its body is round though the mold used to form it is unknown. After the bottle was blown, however, it was turned in the mold, leaving horizontal lines etched in the surface of the bottle. This process is commonly associated with the manufacture of wine bottles during 1880-1910 (Munsey 1970:40). This fragment was found in the root cellar fill.

The sixth bottle type is represented by two amber wine bottle fragments, including a heel fragment. This type of bottle was made in a turn mold. The mold used was not identified, but the fragments have retained the high polish and horizontal striations etched on the bottle surface characteristic of the turn mold process described above. The fragments were recovered from the surface northeast of the root cellar.

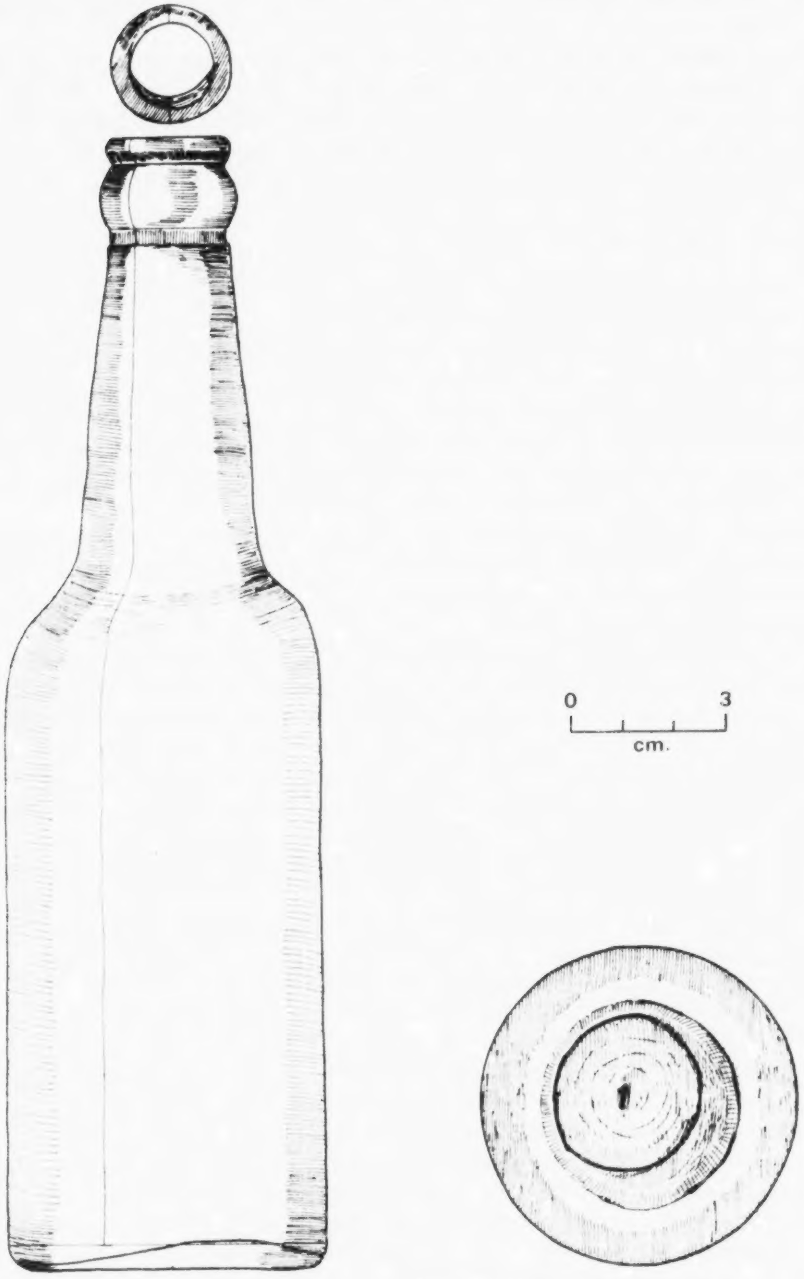

Figure 7-6. Yellow brown alcoholic beverage bottle from saloon cellar floor, Condon Ferry trading post (45-DO-202H).

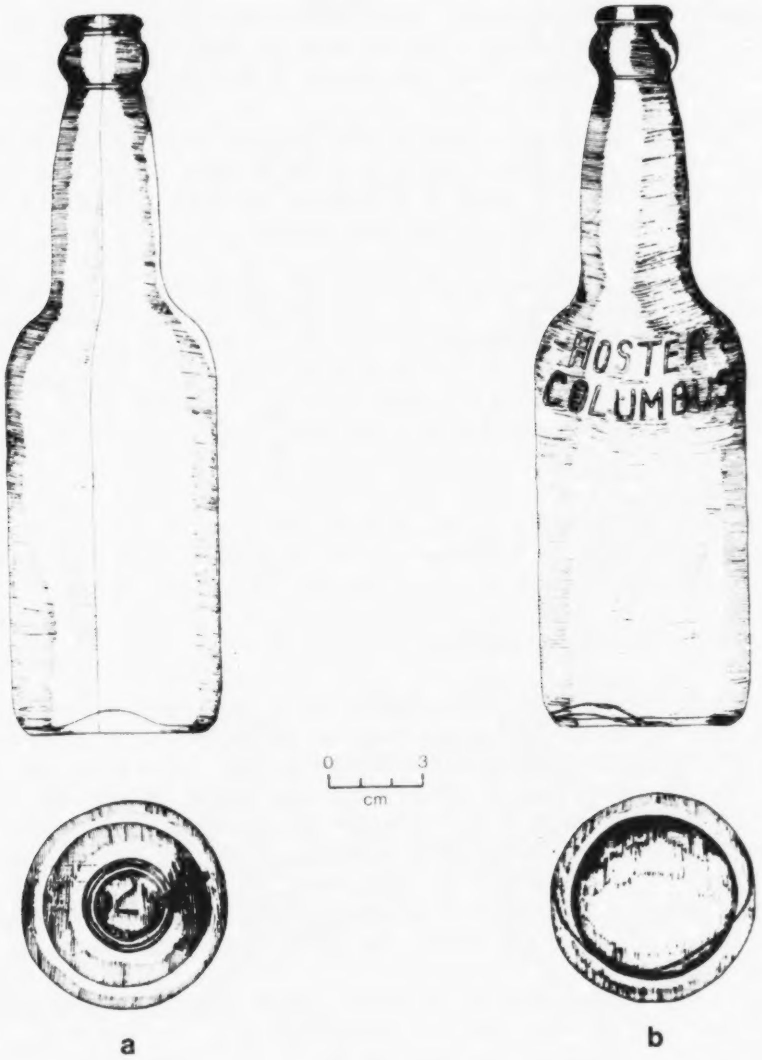
HOSTER
COLUMBUS
2
0
3
cm
a
b

Figure 7-7. Beer bottles from saloon cellar floor, Condon Ferry trading post (45-DO-202H).

a. Dariz amber beer bottle
b. Amber beer bottle

Other fragments in the collection are presumed to have contained alcoholic beverages although there is insufficient information to assign them to a type. They include the following bases and necks.

1. Two amber, slightly bulbous necks, mold-blown with tooled collars for corks. They probably contained whiskey or beer. One neck was recovered from the saloon cellar fill and one from the saloon cellar floor.

2. One amber collar, with a cylindrical lip finish and ring below. It was probably blown in a mold. Collars of this type were associated by Wilson (1981:4-5) with export style beer bottles. The collar was recovered from the fill of the root cellar.

3. One amber neck and base, blown in a post bottom mold with a tooled cylindrical collar lip finish. The basemark of this bottle, probably for beer, consists of "S.B.&G. Co." with a "F" in the center. The manufacturer's mark is that of Streator Bottle and Glass Company of Streator, Illinois, which produced bottles from 1881-1905 (Toulouse 1971:461). Both fragments were recovered from the fill of the saloon cellar.

4. This clear oval base was machine-made and bears a slightly spread suction cutoff scar. The basemark is "S" within a diamond. Probably part of a whiskey flask, it was recovered from the saloon cellar fill.

Soft Drink and Mineral Water Bottles

Three types of soft drink and mineral water bottles were recovered. The first is represented by a light green soft drink bottle made by an automatic bottle machine in a post bottom mold (Figure 7-8;a). It has a crown lip, a round body, an irregular suction cutoff scar, irregular seams, and flaws in the glass. It was recovered from the floor of the saloon cellar.

The second type is represented by a darker green soft drink bottle made by an automatic bottle machine in a post bottom mold (Figure 7-8;b). The lip is a crown type and the round base includes a slightly irregular suction cutoff scar with a "2" in the center. The bottle was recovered from the saloon cellar floor.

A clear, round-bodied soft drink bottle base made by an automatic bottle machine in a post bottom mold is a third bottle type. It has a suction cut off scar slightly spread over the heel of the bottle. The bottle also bears two raised concentric circles above the base and a series of raised concentric circles broken by long and short perpendicular lines covering the shoulder. The partial sidemark of stick-on pink letters consists of "...D'S/...GES/...N," and near the base is printed "Contents 6 1/2 FLD..." The basemark is a "D" in a diamond, flanked by an "A" and "9." It is the mark of the Dominion Glass Company, Montreal, Quebec, Canada, which has manufactured containers from 1913 to the present (Toulouse 1971:154). The bottle base was recovered in the fill of the saloon cellar.

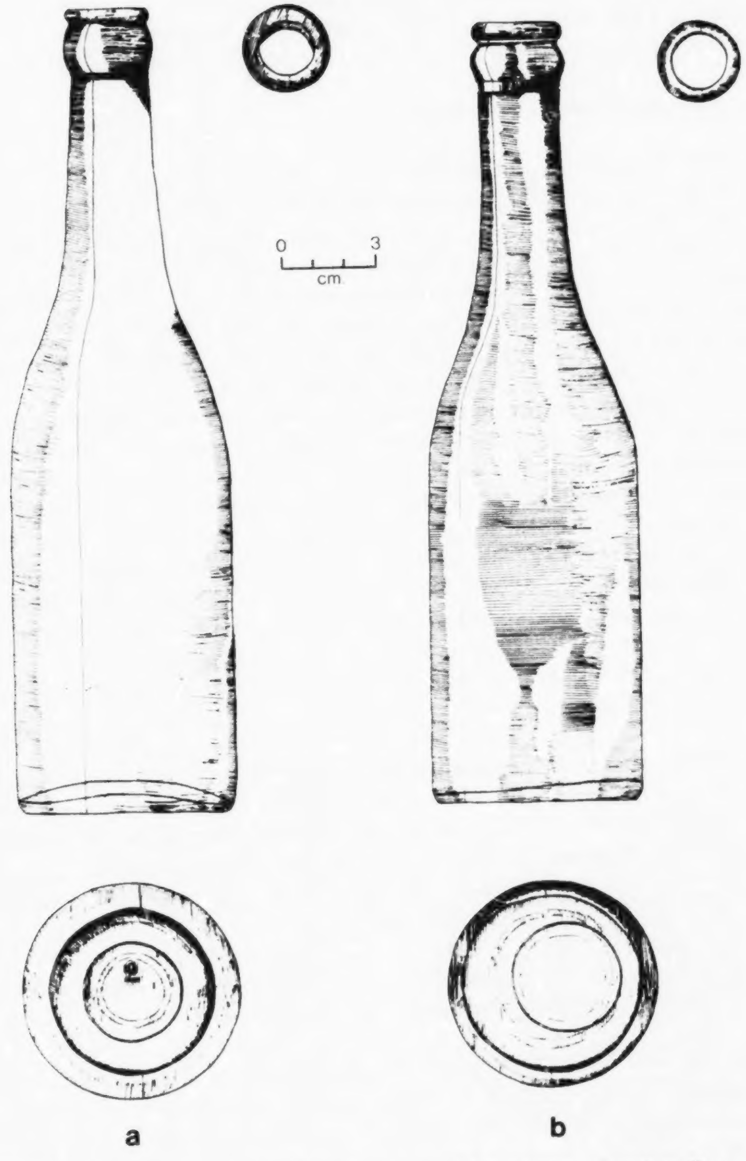

Figure 7-8. Soft drink bottles from saloon cellar floor, Condon Ferry trading post (45-DO-202H).

a. Green soft drink bottle
b. Light green soft drink bottle

Two bottle necks are also presumed to be from soda pop or mineral water bottles. They both have crown lips and are clear. These fragments were located northeast of the root cellar. One is partially melted.

Medicine and Cosmetic Bottles

Two complete bottles belong to this category. The first is a clear peruna bottle with a round body made by an automatic bottle machine (Figure 7-9). The neck has a sloping collar and has been fire polished, eliminating most traces of the seams. The bottle was made in a cup bottom mold and has the basemark, "Dr. S.B.H.&Co./Registered PR." Similar bottles with the same basemark were recovered from Trapper House, Alpowa City (45-AS-87B) which operated between 1900 and 1930 (Adams et al. 1975:49). Our specimen was recovered from the fill of the saloon cellar.

The second medicine bottle is a light green rectangular bottle made by an automatic bottle machine (Figure 7-10). It has a double ring lip with a rounded-collar neck finish and narrow ring at the base of the neck. The only basemark is a small "2" located in a corner of the rectangular base. The suction cutoff scar is slightly irregular and extends over the heel of the base. The bottle has one sunken panel with the raised letters, "SPOHN'S DISTEMPER COMPOUND SPOHN MEDICAL COMPANY GOSHEN, INDIANA, U.S.A." The cork (with a wire nail embedded in it) and two-thirds of the product remain intact. The bottle was found in the fill of the saloon cellar.

The following bottle fragments are presumed to be from medicine or cosmetic bottles.

1. Three amethyst fragments including a base fragment represent a machine-made bottle or jar with a cup bottom mold. They bear the raised letters "L.../PHARMAC..." The amethyst color indicates it was manufactured during between 1880 and 1917; since the bottle was machine-made, it was probably made between 1904 and 1917. The glass fragments were located in the fill of the root cellar.

2. One milk glass threaded neck fragment is probably from a cold cream jar. It was recovered from the root cellar fill.

3. One clear, threaded neck fragment with a ring at the base of the neck probably was part of a medicine bottle. The fragment also has a crown cap tightly attached, suggesting the original cap was lost or the bottle was reused. It was recovered from the floor of the saloon cellar.

Bottles of Unknown Contents

Two types of bottles and fragments are from bottles whose contents are unknown. The first is a clear, machine-made, round-bodied bottle with a post bottom base and irregular suction cutoff scar (Figure 7-11). The seams are uneven and small bubbles are evident in the glass. The cylindrical neck, only slightly more narrow than the body, has a flared lip. It may have contained

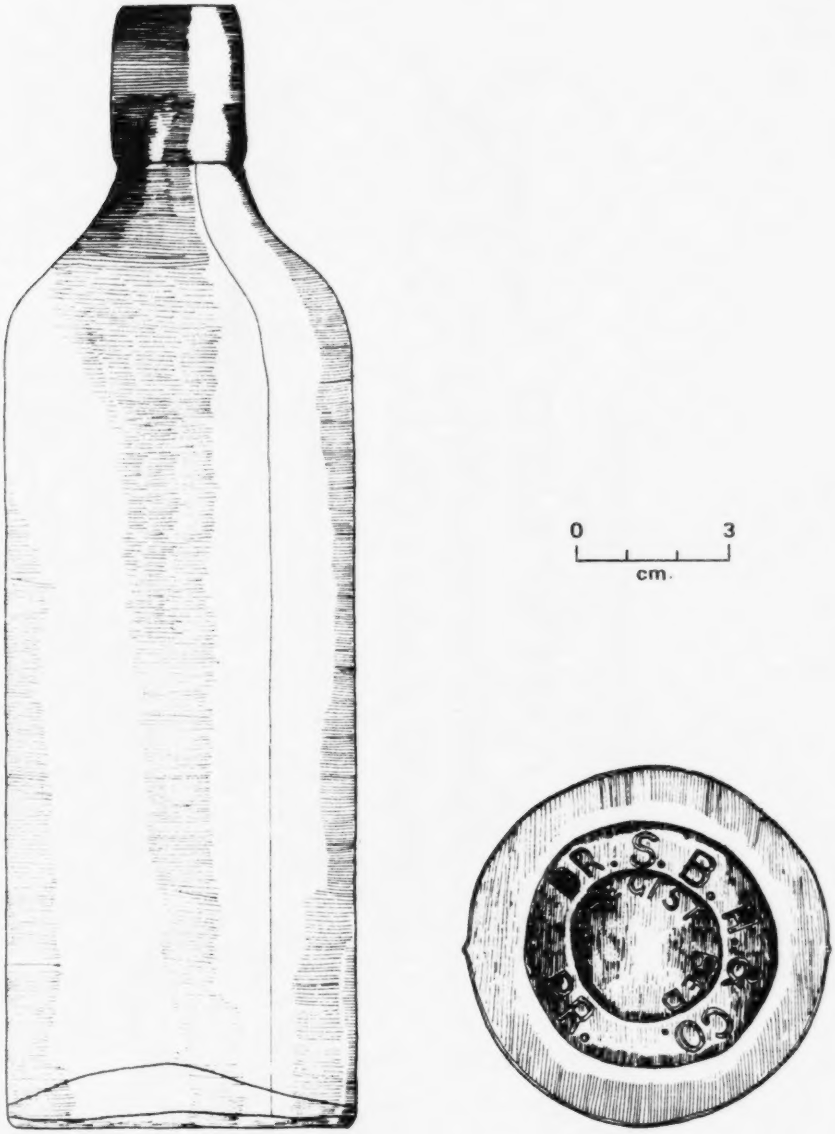
0
3
cm.
DR. S. B. H. & CO.

Figure 7-9. Clear peruna bottle from saloon cellar fill, Condon Ferry trading post (45-DO-202H).

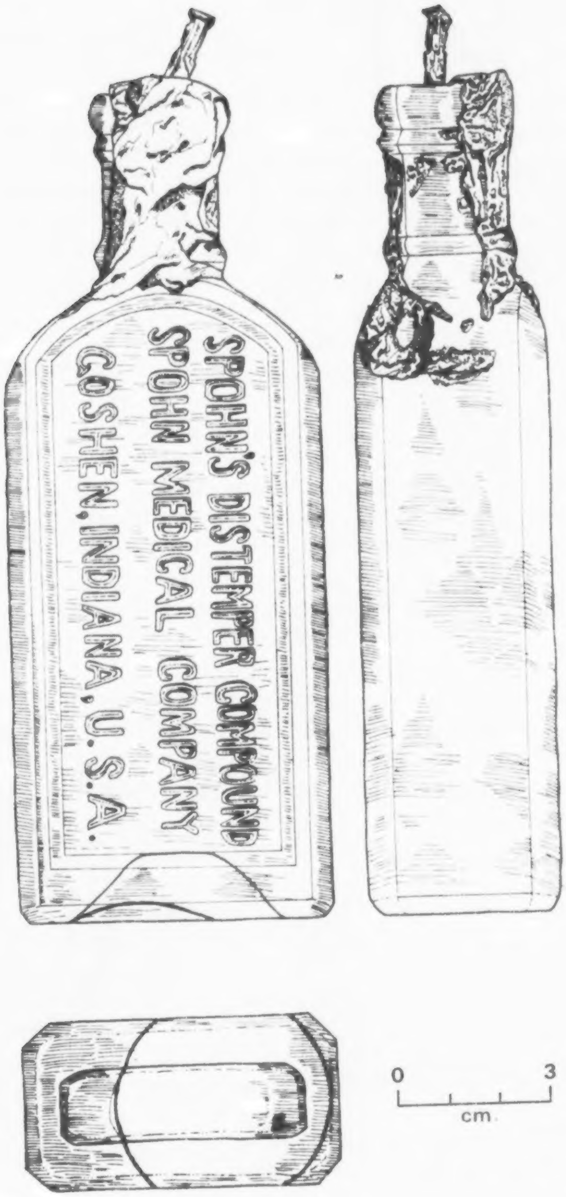
SPOHN'S DISTEMPER COMPOUND
SPOHN MEDICAL COMPANY
GOSHEN, INDIANA, U.S.A.
0
3
cm

Figure 7-10. Light green distemper medicine bottle from saloon cellar fill, Condon Ferry trading post (45-DO-202H).

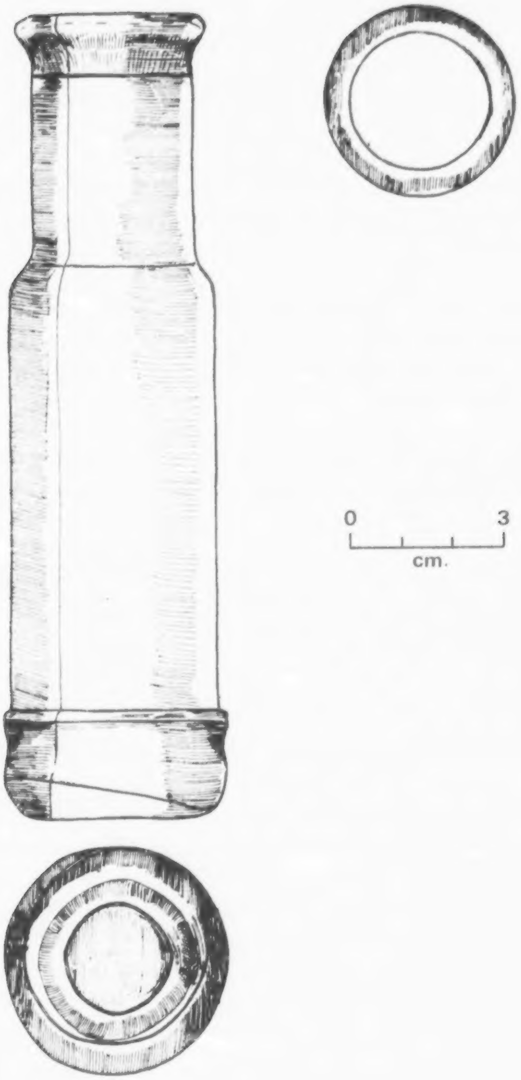

Figure 7-11. Clear bottle, contents unknown, from root cellar floor, Condon Ferry trading post (45-DO-202H).

medicine or a condiment. The bottle was recovered from the floor of the root cellar.

Several amber fragments, including a cup bottom base, represent a second type. The round body is sunken on the front half with the raised letters "1/2-cup" below an arrow pointing to a line. The basemark consists of "0 1S 8." The bottle, which may have contained bleach or other cleaning fluids, was recovered northeast of the root cellar.

The following base and body fragments also represent bottles whose contents are unknown.

1. One amber, round-bodied bottle fragment with the raised letters "VICTORIA B.C./...LTD.," was recovered from the fill of the saloon cellar.

2. One clear, post bottom base made by an automatic bottle machine with a basemark consisting of "THE T. ...RE SERVE CO./CINCINNATI.D." and an "S." in the center of a diamond. This bottle base was recovered from the fill of the root cellar.

3. One amethyst cup bottom base made by an automatic bottle machine with no basemark was recovered northeast of the root cellar in the hotel vicinity.

4. Two fragments of a clear, round-bodied machine-made post bottom base with an uneven suction cutoff scar were recovered northeast of the root cellar in the vicinity of the hotel.

Canning Jars

Three types of canning jars were found at the site. The first is represented by one clear half-gallon canning jar with a cup bottom base. A rim near the lip serves as a platform to lock the spring clip closure (Figure 7-12). The sidemark reads "KERR ECONOMY TRADEMARK" and the basemark "KERR GLASS MFG. CO./CHICAGO ILL." Toulouse (1971:306) dates the manufacture of this jar ca. 1909-1912. It was recovered from the floor of the saloon cellar.

A clear, machine-made quart canning jar with a cup bottom base represents the second type (Figure 7-13). The lip is flawed and threaded for a zinc cap. The sidemark reads "DREY PERFECT MASON" and the base contains a valve mark. The jar dates to ca. 1920 (Toulouse 1971:166) and was made by the Schram Glass Manufacturing Company, St. Louis, Missouri. It was located on the floor of the saloon cellar.

The third canning jar type is represented by an aqua post bottom jar base made by an automatic bottle machine. The basemark consists of the raised letters "44" in the center. It was recovered from the fill of the saloon cellar.

The fourth canning jar type is represented by a machine-made green base with a post bottom base. The fragment has a valve mark in the center made up of three parallel lines. Munsey (1970:41) suggests that this mark is

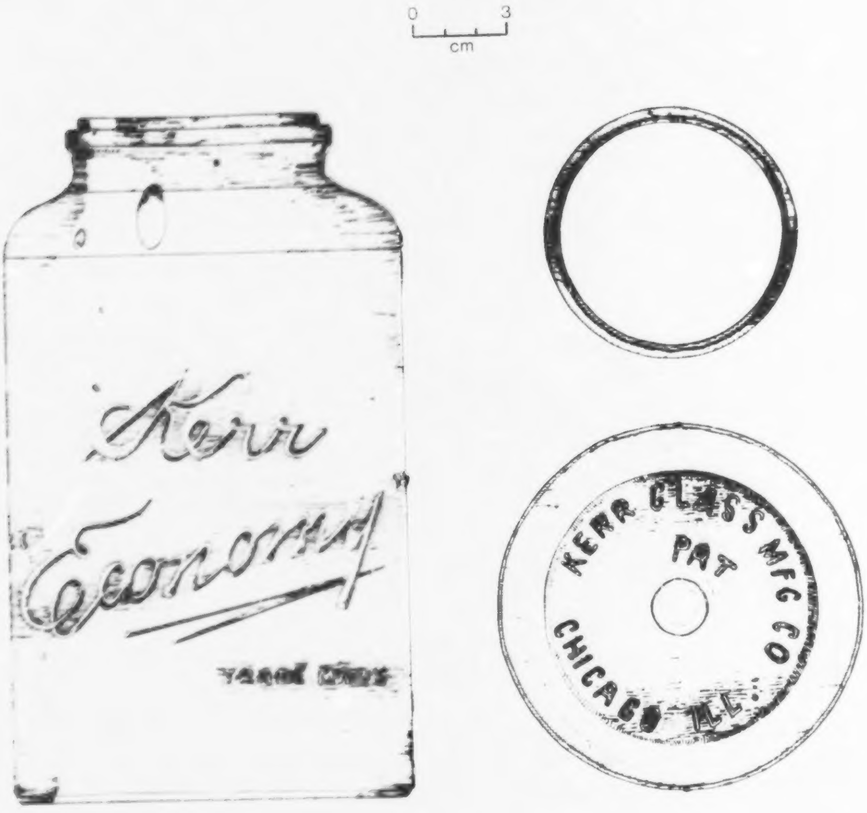
0
3
cm
Kerr
Economy
KERR GLASS MFG CO
PAT
CHICAGO ILL.

Figure 7-12. Clear half-gallon canning jar from saloon cellar floor, Condon Ferry trading post (45-DO-202H).

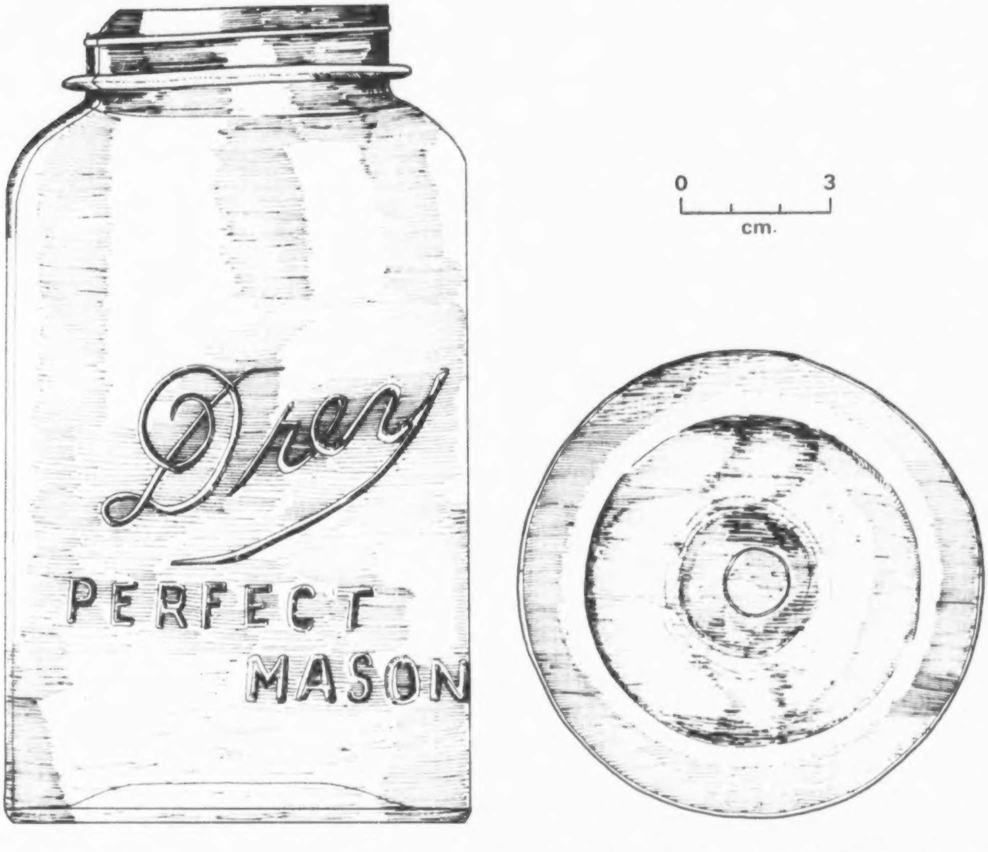
0
3
cm.
Drey
PERFECT
MASON

Figure 7-13. Clear canning jar from saloon cellar floor, Condon Ferry trading post (45-DO-202H).

frequently found on wide-mouth containers from the 1930-1940 period, although that date is late relative to the rest of the collection. This specimen was recovered from the root cellar fill.

Miscellaneous Vessel Glass

A few cut glass, tumbler and other miscellaneous vessel glass fragments were identified and are described below.

Whiskey Tumbler. Fragments of two tumblers, round-bodied and amethyst, with fluted bases are similar to whiskey tumblers recovered from Bill Wilson's Store (45-AS-87A) (Adams et al. 1975:137) in Asotin County. One fragment bears an etched design of continuous ovals, with vertical parallel lines within each oval, on the interior edge (Figure 7-14). This fragment was recovered from the site surface. The other fragment was recovered from the fill of the root cellar. The amethyst color of both fragments indicates a manufacture date between ca. 1885-1917.

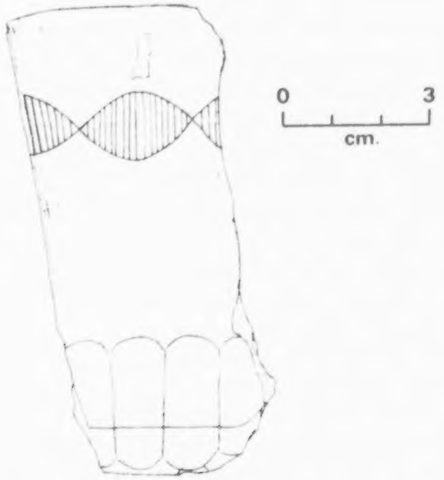

Figure 7-14. Amethyst whiskey tumbler from root cellar fill, Condon Ferry trading post (45-DO-202H).

Cut Glass. Two thick amethyst fragments of cut glass with unidentified patterns were recovered (Figure 7-15). One rim fragment contains sunken ovals surrounded by fluted edges. The lip of the fragment suggests it was a large serving bowl. It was recovered from the site's surface. The second, smaller fragment contains a portion of a geometric design. The function of this vessel could not be determined. It was recovered from the fill of the saloon cellar. The amethyst color of both fragments indicates they date ca. 1885-1917.

Glass Funnel. The spout portion of a clear, ribbed glass funnel was recovered from the fill of the root cellar (Figure 7-16). This type of funnel was advertised as a druggist's sundry in an undated bottle maker's catalogue (Putnam 1965:75).

Unidentified Vessel Glass Fragments. Two fragments, one clear and one amethyst, may be portions of tumblers. The cellar fragment bears a fluted interior and the amethyst fragment contains angular flutes. Both fragments were recovered from the site's surface.

Chimney Glass. Nine chimney glass fragments were recovered, including one rim fragment with a fluted edge. One fragment was located on the site surface while the remaining fragments were recovered from the saloon cellar fill.

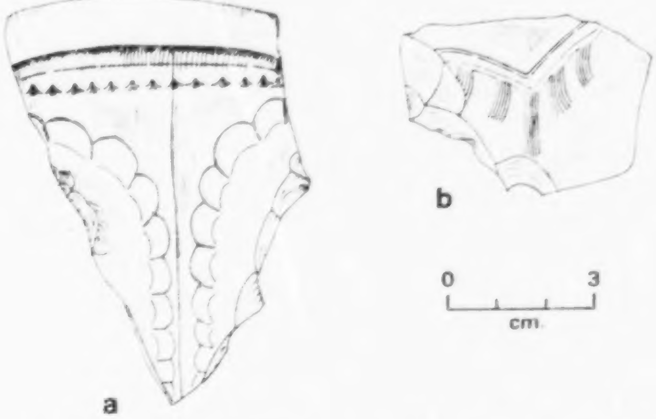

Figure 7-15. Amethyst cut glass fragments from Condon Ferry trading post (45-DO-202H).

a. Glass fragment from the surface
b. Glass fragment from the saloon cellar fill

Canning Jar Sealers. Seven fragments of canning jar sealers bear portions of two trademarks. One fragment has the raised letters "BALL" and two fragments with the letters "GE..." and "POR..." are part of a " BOYD'S GENUINE PORCELAIN LINE CAP," a sealer that dates after 1915 (Toulouse 1971:92). These and three other fragments were recovered from within the hotel vicinity. Two fragments were recovered from the surface.

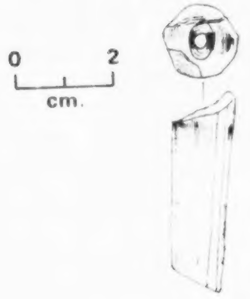

Figure 7-16. Spout of ribbed glass funnel from root cellar fill, Condon Ferry trading post (45-DO-202H).

CERAMICS

The small ceramics collection consists of earthenware, stoneware and porcelain fragments. No complete vessels were recovered. The collection is dominated by thick-walled utilitarian earthenwares with a plain white glaze on white with a molded relief design. The variety of relief designs suggests the tableware used at the Condon Ferry hotel was of various patterns rather than a matched set. A similar pattern of ceramics use was noted at the farming community of Silcott ca. 1900-1930, where Adams (1976:60) reports the "popularity of. . .patterns changed so rapidly that exact replacements were difficult, if not impossible to obtain." Of course, we could not determine if the Condon Ferry hotel made an attempt to use matching tableware or not.

The jugs and crocks that must have been present at Condon Ferry are represented by only a few stoneware fragments. Porcelain vessels, more expensive than earthenware ones, are represented by two artifacts, a hardpaste bowl fragment and an unidentifiable softpaste vessel fragment. The remaining softpaste porcelain fragments are from electric wire insulators. No evidence of decorative or good quality ceramics was recovered. Four earthenware trademarks, all postdating 1891, were recovered.

The ceramics were evenly distributed in the saloon cellar fill, in the root cellar fill, and in the vicinity of the hotel. A few shards littered the site surface. The following is an inventory of the ceramics collection from Condon Ferry.

Earthenware

Sixty-five earthenware fragments, including hardpaste with surface decorations of molded relief, pearlware, handpainting and transfer printing were identified.

Plain White Earthenware. Thirty-five plain white earthenware fragments are present in the ceramics collection. Although only a bowl and plate were identified, they represent cups, saucers, plates, bowls, chamberpots and other whitewares commonly used for everyday purposes. Seven fragments bore portions of molded relief or repousse designs including scalloped rims with curvilinear, floral and dot motifs on the interior and exterior (Figure 7-17).

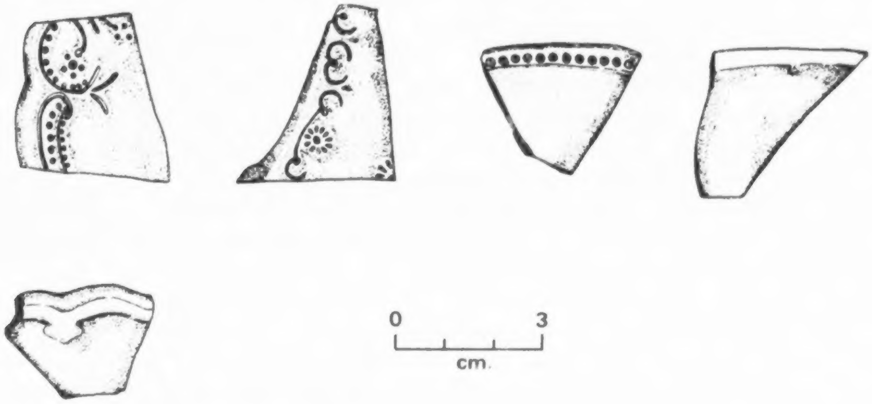

Figure 7-17. Five earthenware patterns decorated with repousse' from Condon Ferry trading post (45-DO-202H).

Four of these fragments bear surface decoration of three types.

1. One white earthenware rim fragment bears a scalloped edge and handpainted gold curvilinear motif on the interior rim (Figure 7-17).
2. One white earthenware fragment has a green transfer floral motif (Figure 7-17).
3. Two heavily burned earthenware fragments have a handpainted polychrome (blue, tan, beige, orange, brown) geometric pattern on the interior rim (Figure 7-17).

Hardpaste Earthenware. Fifteen fragments of hardpaste earthenware were identified, including four plain white fragments and 11 pearlware fragments, two of the latter had a molded relief motif.

Stoneware

Five stoneware fragments, including examples of three types, were recovered.

1. Three stoneware fragments, representing a wheel-thrown crock with a brown glazed interior and exterior, were badly burned. Their exteriors had a salt glaze.
2. Another crock is represented by one stoneware fragment with a gray salt-glazed exterior and light gray interior.
3. One unidentified vessel is represented by a single fragment with a black exterior glaze and gray interior glaze.

Porcelain

Sixteen hardpaste and softpaste porcelain fragments represent bowls and electric insulators. One complete electric insulator was also recovered from the saloon cellar fill (Figure 7-18).

Hardpaste Porcelain. Four fragments with a white glazed exterior and green glazed interior with a pink transfer rose are probably from a bowl.

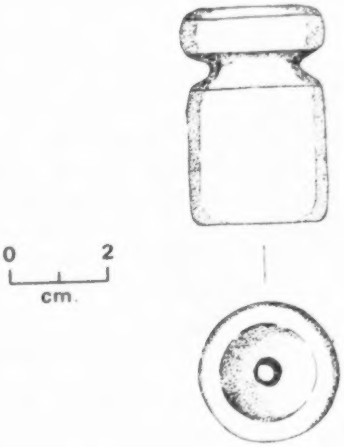

Figure 7-18. Softpaste porcelain electric insulator from saloon cellar fill, Condon Ferry trading post (45-DO-202H).

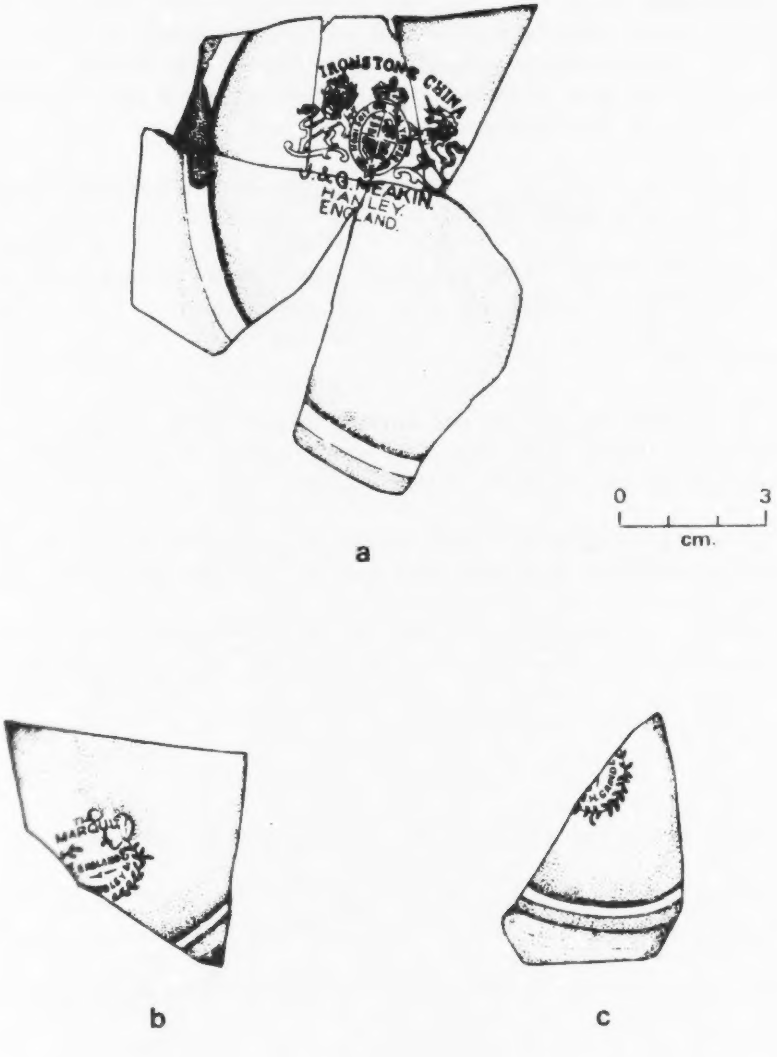
IRONSTONE CHINA
J.&G.MEAKIN.
HANLEY.
ENGLAND.
0
3
cm.
a
b
c

Figure 7-19. Earthenware trademarks from Condon Ferry trading post (45-DO-202H).

a. Black transfer trademark of J. & G.Meakin, Hanley, England, post-1891.
b. Black transfer trademark of H.H. Grindley, Tunstall, England, post-1891.
c. Black transfer trademark of H.H. Grindley, Tunstall, England, post-1891.

Softpaste Porcelain. An unidentified utilitarian vessel is represented by one plain white fragment; five fragments of plain white softpaste porcelain, one with an impressed "L," represent wire insulators constricted at one end and perforated inside to hold a carbon cylinder.

Trademarks

Four partial English trademarks, representing four vessels and two companies, were recovered from the site surface, hotel vicinity and the floor of the saloon cellar. All represent hardpaste earthenware vessel types and all are black transfer trademarks. The one recovered from the saloon cellar floor consists of "THE MARQUIS/ENGLAND/H.(H. GRI)NDLEY" above a laurel wreath (Figure 7-19;b). The mark is that of H.H. Grindley, Tunstall, Great Britain (Paul and Petersen 1974:120). The word "England" indicates a manufacture date after 1891 (Godden 1968:10). A second partial Grindley trademark with the letters "H.H.GRINDLEY.../E..." printed on a pearlware fragment was recovered from the site surface (Figure 7-19;c). Two partial trademarks also represent the company of J. & G. Meakin, Hanley, Great Britain (Kovel and Kovel 1953:202), whose firm produced a quantity of earthenware, especially white graniteware, in imitation of French china after 1852 (Godden 1972:58). One fragment includes "...MEAKIN/...NLEY./...LAND."; and the other has "IRONSTONE CHINA" printed above a Royal lion and unicorn emblem with "J & G MEAKIN/HANLEY/ENGLAND" printed below (Figure 7-19;a). Again, the word "England" indicates a post-1891 date. Both trademarks were recovered from the hotel vicinity.

METAL

A large collection of metal objects was recovered from the Condon Ferry trading post (Table 7-2). Many were burnt, probably during the 1953 clearing of the site. Corroded and fragmented metal objects which could not be identified were excluded from the analysis. The nail, can, and cartridge categories are represented by the largest numbers of specimens, while a variety of unique items are found in the miscellaneous categories.

Nail and Other Construction Fasteners

Nails, the most frequent artifact type recovered from Condon Ferry, include 2,396 modern wire and square nail fragments and complete nails. Seventeen other construction fasteners were also recovered. Ninety-two nail fragments were undifferentiated and excluded from analysis.

Nearly one-quarter of the nail collection consists of square nails: 671 were identified, while 114 were excluded from analysis because of corrosion, excessive rust or extreme fragmentation. The square nail sample consists entirely of machine cut nails.

As noted in Chapter 2, square cut nails were manufactured in a number of types and sizes, each size commonly used for specific construction purposes. The Condon Ferry collection contains a variety of square nail sizes, but only two types were identified, the common cut and the hinge nail. As in Fontana and Greenleaf's (1962:63) collection from Johnny Ward's Ranch, some of the square nails from Condon Ferry classified as common cut may be fencing nails with the heads flattened from hammering. In addition, nails measuring a fraction of an inch shorter than the standard sizes were probably compressed from hammering. Many of the square cut nails were encased in charred wood, presumably the result of the 1953 razing of Condon Ferry. Table 7-4 summarizes square nail counts and measurements.

Table 7-4. Types, sizes and number of square cut nails recovered from Condon Ferry, 45-DO-202H.

Common Construction Use	Size	Length (in)	Common Cut	Hinge	Total
	2	1			
Shingling	3	1 1/4		1	
Slating	4	1 1/2	109		
	5	1 3/4	6		
Clapboarding	6	2	56		
Finish	7	2 1/4			
Flooring	8	2 1/8	68		
	9	2 3/4	2		
Boarding	10	3	80		
	12	3 1/4	32		
	16	3 1/2	4		
	20	4	1		
	30	4 1/2	2		
Framing	40	5	1		
	50	5 1/2			
	60	6			
Subtotal			361	1	362
Heads with broken shanks			194	1	195
TOTAL			555	2	557

The remainder of the nail collection consists of 1,725 modern wire nails. Again, many of these nails were corroded and fragmented, exempting 195 wire nails from analysis. Table 7-5 summarizes wire nail counts and measurements.

Fred Weber (personal communication 1983) comments that Jergensen, the carpenter who built the hotel, used wooden pins for joining and Weber and Wyborney (1970:5) state that square nails were used throughout construction of

Table 7-5. Summary of wire nail types and counts from Condon Ferry, 45-DO-202H.

Size	Length (in)	Common/ Standard	Finishing	Brad	Barrel	Roofing	Total
	3/4	1				2	
2	1	37		4			
	1 1/8				166	1	
3	1 1/4	156					
4	1 1/2	22				1	
5	1 3/4	12					
6	2	234	4				
7	2 1/4	1	1				
8	2 1/2	180	7				
9	2 3/4	8					
10	3	432	2				
12	3 1/4	21					
16	3 1/2	28					
20	4	28					
30	4 1/2	12					
40	5	21					
50	5 1/2	2					
60	6	11					
Unmeasurable shanks		134	2				
Total		1,340	16	4	166	4	1,530

the hotel. The presence of wire nails probably indicates post-1890 repairs, alterations or maintenance, including the addition of wainscoting mentioned above. The hotel was also probably modified when it began to function as a post office in 1890 and as a school in 1897 (Weber and Wyborney 1970:7).

Distribution of the square cut and wire nails provides little supportive data. The distribution of both nail types is nearly identical, with a slightly higher percentage of square cut nails recovered from the north wall of the hotel. The distribution of nail types and sizes appears to be random, except for barrel nails, which were nearly all recovered from the saloon cellar fill and from the hotel vicinity.

Other Construction Fasteners

Thirty-nine other construction fasteners include tacks, screws, one spike, staples, nuts, washers, an eyebolt and a bolt. The fourteen tacks, are of various sizes--3/8 in, 1/2 in, 5/8 in, and 3/4 in, were found in the saloon cellar fill and along the north wall of the hotel just as the nail collection was. The wood screw fragment and machine screw (1/4 in) were recovered between the saloon cellar and the hotel, one complete wood screw (3/4 in) from the hotel vicinity and the 6-in square spike from the root cellar fill. Three wrought iron staples (1 5/8 in) and one wire staple (3/16 in) were recovered from the saloon cellar fill, four wire staples were found between the saloon cellar and the hotel, and one wire and wrought iron staple came from the hotel vicinity. Two square staples were also recovered from the saloon cellar fill. With the exception of one nut (1 1/4 in), all nuts, bolts and washers were recovered from the saloon cellar fill. They include two nuts (3/4 in, 2 1/4 in), one wing nut (1 3/4 x 1 1/4 in), one bolt (4 3/4 in), and three washers, ranging in diameter from 1 1/4-1 5/8 in. One eyebolt (2 3/4 in in length) was also recovered from the saloon cellar fill.

Tin Cans

Over 650 tin fragments were identified as those of tin cans, used in the canning of lobsters, oysters, salmon, fruits, vegetables, pickles, jellies, and sauces. Open-top cans predominated but sardine and condensed milk cans were also numerous. Some of the few resealable cans may also have contained condiment food items, but most of these were pocket tins for tobacco. Marketed during the early 1900s, pocket tobacco tins were once as common as modern cigarette packages (Clark 1977:90). The identifiable non-culinary tinned can items include a paint can and two tagger cans for kerosene or gas. The open-top cans, essentially the same as modern tin cans, were standardized at least by 1936 (Cruess 1948:49). Not all the open-top cans in our collection correspond to those dimensions. Corrosion and damage to the cans was likely responsible for the altered measurements. Dimensions of the complete cans or bases and lids are included in Table 7-6. Following is an inventory of the identifiable types of tin cans present in the Condon Ferry collection.

Hole-in-top. Eight fragments, including seams and lids, represent at least four hole-in-top cans. Fragments were recovered from the root cellar fill, the saloon cellar fill and the site surface.

Open-top. Five squashed but complete open-top cans include two No. 303 cans and one No. 10 can. Two complete cans do not bear standard dimensions. A base represents a picnic or No. 1 oyster can. Two hundred and forty-eight fragments represent an unidentifiable number of open-top cans and include a partial base filled with dried black paint. Four complete cans were recovered from the root cellar fill, one from the site surface and the remaining fragments from the saloon cellar fill and floor.

Sardine. Five sardine cans were identified, three with complete dimensions. One includes a tab for a roll strip opener. Another is a modern sardine can with a tab for rolling the top back and has the key attached. These two cans and another incomplete sardine can were recovered from the saloon cellar fill.

Table 7-6. Dimensions of tin can types from Condon Ferry, 45-DO-202H.

Type	Top or base Diameter (in.)	Height (in.)
Round Can		
open-top (No. 10)	6 3/16	7
open-top	5 1/4	-
open-top	2 3/16	4
open-top (Acme size or No. 1 eastern oyster	2 11/16	-
open-top (No. 303)	3 3/16	-
open-top (8 oz)	2 11/16	3/4
open-top (No. 303)	3 3/16	4 3/8
hole-in-top	3	-
hole-in-top	3 7/8	4 3/4
condensed milk (No. 1 tall)	3	4 3/8
condensed milk (small)	2 1/2	2 1/2
resealable/pry-up lid paint can	3	1 5/8
Oval Can		
resealable/tobacco	3 1/4	4 1/4
resealable/tobacco	3 1/4	4 1/4
resealable/tobacco(?)	3 1/4	5 1/4
resealable/tobacco	4	4 3/4
resealable/tobacco	3	4 1/4
resealable/tobacco	3	4 1/4
Rectangular Can		
resealable lid	8 x 5 1/2	7/16
resealable lid	4 3/4 x 3 1/2	-
sardine with key and tab	4 3/8 x 3 3/8	3/4
sardine	4 1/4 x 3 1/8	-

The remaining two can fragments were recovered from within the saloon structure and on the site surface.

Condensed Milk. Two complete and two partial condensed milk cans include a No. 1 tall and a small condensed milk can bearing pre-1932 measurements, and one partial milk can with post-1931 dimensions (Fontana and Greenleaf 1962:75). The latter bears evidence of the triangular tab resulting from opening the can. These cans were recovered from the root cellar fill. A part of another milk can was recovered from the saloon cellar fill.

Resealable. Four complete pocket tobacco tins, two larger tobacco tins, a tobacco tin fragment, two rectangular lids, and a small paint can compose this collection. Other fragments are likely of resealable tins, but are not readily distinguishable from open-top cans. Four complete pocket tobacco tins, recovered from the site surface, have hinged lids and oval bases. One yellowed tin has the brown letters, "PRIME A..." Another tobacco tin fragment, recovered from the root cellar fill, includes a white paper label fragment with the red letters, "TO..." and a black curvilinear design. One larger tobacco tin was recovered from the root cellar fill and the other tobacco tin and rectangular lids were recovered from the saloon cellar fill. The small paint can, which has a depressed, pry-up lid, was also recovered from the saloon cellar fill.

Tagger. Over 200 thin sheet metal fragments representing two kerosene/gas cans were recovered from the root cellar fill and the saloon cellar fill. One includes the threaded inset for the cap and the other appears to be a five-gallon container.

Cartridges

Fourteen cartridges were recovered from excavations at Condon Ferry. They indicate the use of firearms for self-defense, hunting of small game and large game and perhaps target shooting. Although a few of the cartridges were undoubtedly discarded by hunters after the site was abandoned, the sizeable cartridge assemblage indicates that wild game probably supplemented the agricultural fare at Condon Ferry.

Six cartridges were recovered from the saloon cellar fill: four east of the hotel, one in the hotel interior, one in front of the hotel, and two from the saloon/store structure.

The inventory of cartridges recovered from Condon Ferry includes the following.

1. .22 calibre short, U.S. Cartridge Company (Figure 7-20;b); one cartridge case. This type of cartridge, introduced in 1857 for the Smith and Wesson First Model revolver, is the "oldest American, commercial, self-contained, metallic cartridge" (Barnes 1980:289). Although intended for self-defense, the shell is satisfactory for very small game and bird hunting when high velocity loading is used. The U.S. Cartridge Company of Lowell, Massachusetts, is now defunct (Serven 1959:162).

2. .22 calibre long, manufacturer unknown (Figure 7-20;a); one cartridge case. This rimfire cartridge was first listed in a catalog in 1871 and is still in use for short range, small game shooting (Barnes 1980:289).

3. .30 calibre long, Union Metallic Cartridge Company (Figure 7-20;c); five cartridge cases, three manufactured by Union Metallic Cartridge Company and two by unknown manufacturers. This cartridge appears in catalogs by 1873. It was used in Colt, Standard X.L. and Sharps handguns, and also

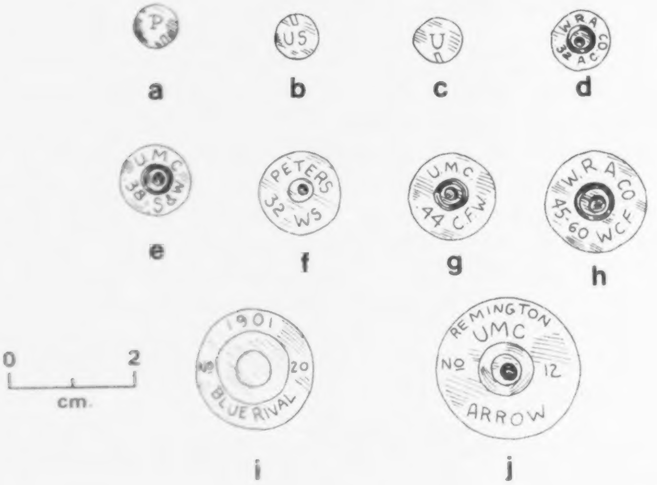

Figure 7-20. Headstamps of cartridges from Condon Ferry trading post (45-DO-202H).

a. .22 calibre long, manufacturer unknown
b. .22 calibre short for the Smith and Wesson First Model revolver, U.S. Cartridge Company
c. .30 calibre long for Colt, Standard X.L., Sharps handguns and single shot rifles, Union Metallic Cartridge Company
d. .32 Automatic, Winchester Repeating Arms Company
e. .38 calibre for Smith and Wesson Revolver, Union Metallic Cartridge Company
f. .32 calibre for the Winchester Special, manufacturer unknown
g. .44 calibre, Union Metallic Cartridge Company
h. .45-60 calibre Winchester, Winechester Repeating Arms Company
i. 20 guage shotgun shell, manufacturer unknown
j. 12 guage shotgun shell, Remington Arms Company

a few single shot rifles. Manufacture was discontinued before 1917 (Barnes 1980:292). The Union Metallic Cartridge Company first used the "U" trademark in 1885 (Mueller and Olson 1968:296), placing three of these cartridges from ca. 1885-1917. This rimfire is considered a good small game calibre shell to "about 50 yards, although accuracy is not outstanding, it would kill cleanly and not spoil the meat" (Barnes 1980:292).

4. .32 Automatic, Winchester Repeating Arms Company (Figure 7-20;d); one cartridge casa. This centerfire is one of the most popular pistol cartridges developed and was first marketed in the United States in 1903 (Barnes 1980:167). It is the smallest size that can be considered

useful for self-defense and hunting; it is useless for game larger than rabbits or birds (Barnes 1980:167).

5. .38 calibre for Smith and Wesson revolver, Union Metallic Cartridge Company (Figure 7-20;e); one cartridge case. Smith and Wesson introduced their hinged-frame revolver ca. 1877. The cartridge has since become one of the more widely adapted revolver cartridges and enjoys worldwide use (Barnes 1980:177). It is not well-suited as a hunting cartridge, but can be improved by handloading, and is best suited as a lightweight pocket gun.

6. .32 calibre for the Winchester Special, manufacturer unknown (Figure 7-20;f); one cartridge case. This centerfire was introduced in 1895 for the Winchester Model 94 Lever Action and is considered a deer cartridge (Barnes 1980:61).

7. .44 calibre, Union Metallic Cartridge Company (Figure 7-20;g); one cartridge case.

8. .45-60 calibre Winchester, Winchester Repeating Arms Company, (Figure 7-20;h); one cartridge case. This cartridge was introduced in 1879 for the Winchester 1876 Centennial Model Rifle and was also used in the Kennedy Lever Action repeating rifle and Colt Lightning slide action repeater. Production of the cartridge was discontinued in 1935. "The .45-60 was a better deer cartridge than a .44 WCF, but not enough to qualify for larger game" (Barnes 1980:123).

9. 20 gauge shotgun shell, manufacturer unknown (Figure 7-20;i); one case.

10. 12 gauge shotgun shell, Remington Arms Company (Figure 7-20;j); one case. "Arrow" was a trademark of Union Metallic Cartridge Company in 1901 (Mueller and Olson 1968:270). However, the addition of Remington to the headstamp occurred after Remington merged with the Union Metallic Cartridge Company in 1910 (Karr and Karr 1951:7).

Miscellaneous Metal

Handles, Brackets and Clamps

This category includes a variety of items commonly associated with a farmstead. A cabinet handle or pull and an ornate portion of a latch including the opening to contain the bolt and the screw intact were recovered from the saloon cellar fill (Figure 7-21). Another small iron rod with an ornate knob, which probably represents a handle, was recovered between the saloon cellar and the hotel (Figure 7-22). Two flat circular fragments with holes represent a doorknob assembly recovered from the hotel vicinity. A small machinery knob and broken circular handle/pull (Figure 7-23) also were recovered from the saloon cellar fill. One wall bracket, one complete and one partial circular hose clamp were located in the saloon cellar fill.

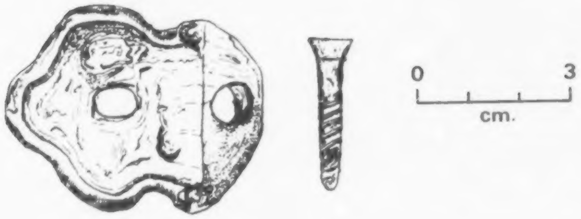

Figure 7-21. Half of metal latch from saloon cellar fill, Condon Ferry trading post (45-DO-202H).

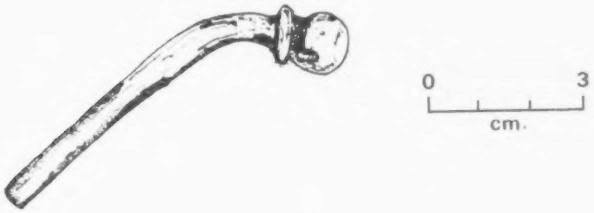

Figure 7-22. Iron rod with knob from between saloon cellar and hotel, Condon Ferry trading post (45-DO-202H).

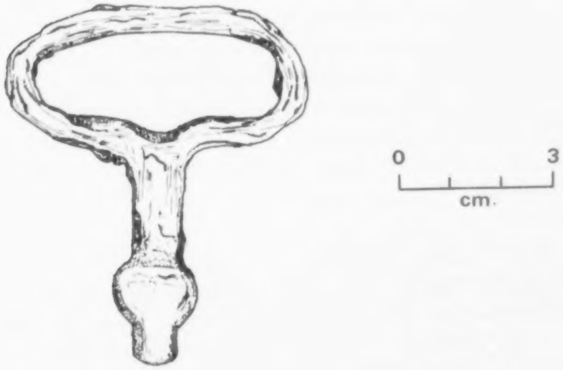

Figure 7-23. Circular handle/pull from saloon cellar fill, Condon Ferry trading post (45-DO-202H)

Chains, Wire and Barrel Hoops

Wire was identified in nearly all units of the site, but predominated in the saloon cellar fill. Types include fine picture wire, single strand, twisted strand and two types of barbed wire, including Elwood Junior Two Point Double Round Line (Thurgood 1979:10) (Figure 7-24). Chain links were recovered from outside the hotel structure and the saloon cellar fill. The only type identified was a length of chain made of swivel links (Figure 7-25). Barrel hoop fragments, including some with rivets, were recovered from the saloon cellar fill. Other strap metal recovered from the same area may also be barrel hoop fragments.

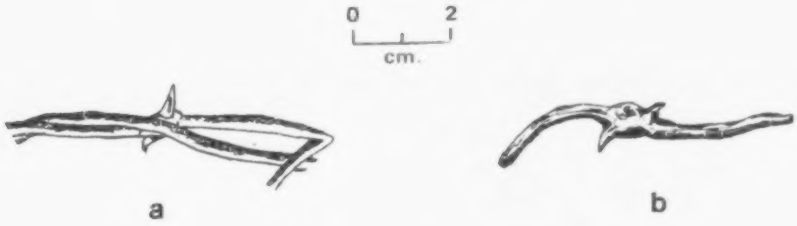

Figure 7-24. Barbed wire types from Condon Ferry trading post (45-DO-202H).

a. Elwood Junior Two Point Double Round Line
b. Unidentified type

Shovels, Pails, and Hay Racks

One shovel blade with the handle fitting was recovered from the saloon cellar fill and one fitting for the long wooden handle of a tool such as a shovel was recovered from the site surface. Also recovered from the surface was a complete, but damaged pail. Other pail fragments represent at least four pails and included a wire handle, two wire handle fittings and 50 fragments of one pail. All were recovered from the saloon cellar fill. Three fragments of a cast-iron wire hay rack were distributed between the saloon cellar fill and the surface.

Sheet Metal, Pipes

One pipe fragment (2 1/4 in in diameter) with a fitting at one end, and a large galvanized sheet metal fragment, were recovered from the saloon cellar fill. The remaining items were located on the site surface and include two fragments of sheet metal, each with a nut and bolt attached, a large folded piece of galvanized sheet metal with a raised herringbone pattern and several sheet metal fragments.

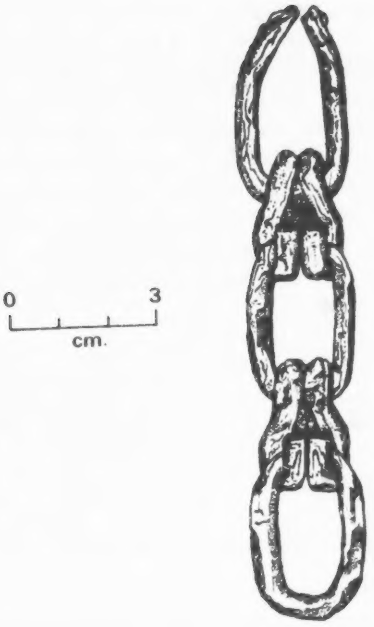

Figure 7-25. Length of chain from Condon Ferry trading post (45-DO-202H).

Clothing Fasteners

One suspender buckle was recovered from the surface and one shoelace grommet from the saloon/store structure. Six grommets, including one of copper, were recovered from the saloon cellar fill, but it is uncertain whether they were associated with clothing. One straight pin (1 3/8 in) was recovered from the hotel vicinity as was a complete stick pin or scarf pin with a threaded point. A piece of green glass (an imitation "emerald") was set in the flattened ball setting.

Harness Fittings

One slightly curved harness buckle (2 x 1 5/8 in) (Figure 7-26;a) was recovered from the saloon cellar floor and one harness bolt snap (3 1/2 x 1 1/2 in) (Figure 7-26;b) with the snap portion broken was recovered from the hotel vicinity. One large iron harness ring (3 3/4 x 3 in) was recovered from the floor of the root cellar.

Stove Parts, Bottle Caps, and Zinc Canning Lids

Fourteen cast-iron stove parts were identified, including four burner fragments with the letters, "SYRACUSE MANUFACTURE PATENT ...LIED," and recovered from the saloon cellar fill. Three cast-iron stove parts were also located on the floor of the saloon cellar, and several in front of the hotel. One stove part fragment recovered from the surface is square (3 x 3 in) with four rounded legs, scalloped edges with holes throughout the top and a manufacturer's mark of "KENTON" (Figure 7-27). Other cast iron fragments, identified on the site surface and in the saloon cellar fill, may also be stove parts. They include one small fragment with the letters "US."

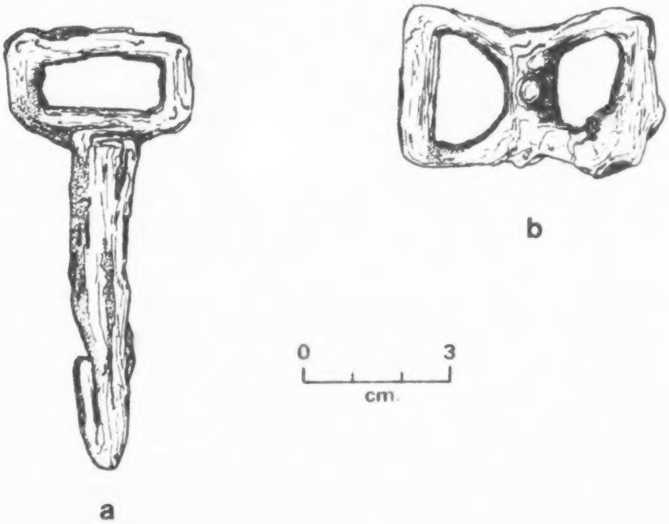

Figure 7-26. Harness fittings from Condon Ferry trading post (45-DO-202H).

a. Slightly curved harness buckle
b. Harness bolt snap

Five crown bottle caps, one with a cork inset, were recovered from the root cellar fill and one crown bottle cap with a cork inset was located between the hotel and the saloon cellar. One zinc canning lid with a porcelain liner bearing the molded words "BOYD'S GENUINE PORCELAIN LINER," was recovered from the floor of the saloon cellar, and two zinc canning lids were located on the site surface, one with a porcelain liner identical to that above. Both sealers date after 1915 (Toulouse 1971:92). One metal canning sealer was also recovered from the site's surface, with the letters "PAT-8-31-15" printed on it.

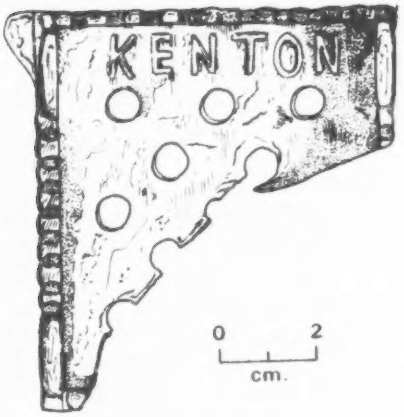

Figure 7-27. Cast-iron stove part from Condon Ferry trading post (45-DO-202H)

Key, Aluminum Tube, Knife, Call Bell, and Ruler

A roll strip can opener key (Figure 7-28;a) was recovered between the saloon cellar and the hotel, and an enamel bowl fragment was recovered from the hotel vicinity. An aluminum dinner knife blade with an insert for a handle attachment was recovered from the saloon cellar floor (Figure 7-28;b). A crushed aluminum tube that probably contained cream included portions of the painted words, "THE WORL(D)S," on one side, and on the other side, "AROUN... PUNC... NO... NE AP... APPLY PAT... ...INKLE TALCUM." It was recovered from the site surface. A possible call bell fragment, consisting of two circular fragments, one smaller than the other and attached in the center with a small bolt, was recovered from the saloon cellar fill (Figure 7-28;c). Two fragments of a metal ruler with inch divisions were recovered from the hotel vicinity.

Machinery Parts, Battery and Springs

Nine fragments probably are associated with machinery. Five cast iron fragments appear to be part of a metal plate and contain holes for bolts; they were recovered from the hotel vicinity. A metal rod (3 x 1/8 in) with threads on one end was recovered from the floor of the saloon cellar and a round iron "lid" (3 3/8 in diameter) with a rim and holes of varying sizes was recovered from the surface. Also recovered from the surface was an iron piece with holes for bolts. Another iron piece, rectangular with a triangular piece riveted in place, was recovered from the saloon cellar fill. A possible battery (7 1/4 x 4 3/8 x 3 1/2 in) splotched green and white, perhaps from acid, was recovered from the saloon cellar floor. Three springs, two measuring 1 1/4 x 1/4 in and one measuring 3 1/8 x 3/4 in, were recovered fro the saloon cellar fill.

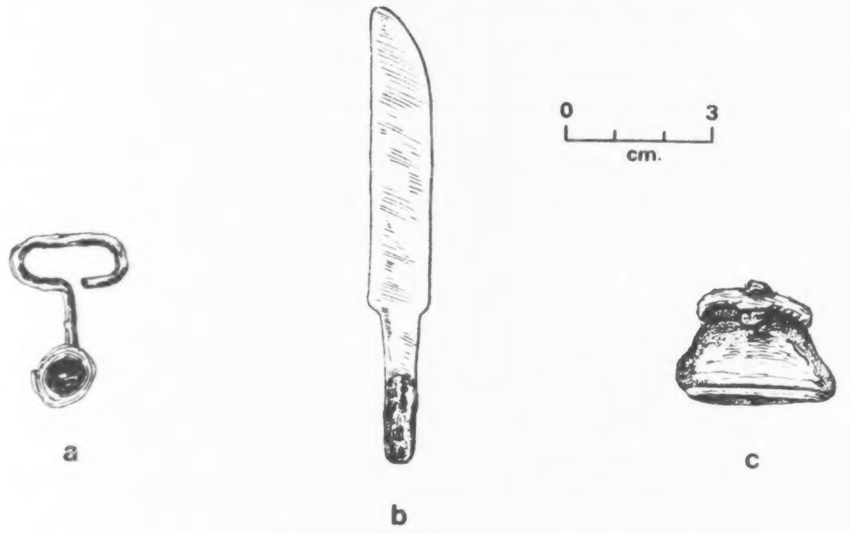

Figure 7-28. Miscellaneous metal objects from Condon Ferry trading post (45-DO-202H).

a. Roll strip can opener key
b. Aluminum knife blade
c. Possible call bell fragment.

Containers

Two square containers, one so damaged its measurements could not be determined and the other roughly 3 x 3 ft, were recovered from the saloon cellar fill. The box was filled with soil and a white residue, probably lime, likely a result of its use in a privy. The second box's function is unknown.

Toys

One steering wheel (1 in diameter), with three spokes extending from the center to the perimeter, was from a toy car. It was recovered from the hotel vicinity.

Many fragments of unidentified scrap metal and several unidentified iron objects were distributed throughout the site.

BUTTONS

Twelve complete buttons and two button fragments were recovered, primarily from the saloon cellar fill. The buttons are of porcelain, metal and shell.

1. Two porcelain buttons, including an incomplete Prosser type, were recovered from the hotel vicinity. The Prosser button illustrates a technique developed before 1850 and still used by a few manufacturers. It is a utilitarian button, for use on underwear, workshirts or other garments. Our example is a 4-hole sew-through (1/2 in diameter) with a recessed panel (Figure 7-29;b). The second porcelain button is also a 4-hole sew-through (3/5 in diameter) with a recessed panel and curved back (Figure 7-29;a).

2. Four metal buttons, including two overall buttons (Figure 7-29; c,d,e,f), were recovered from the saloon cellar fill, between the saloon cellar and the hotel, and in the hotel vicinity. One overall button (3/5 in diameter) contains the raised letters "...HANCAR...Co.," (Figure 7-29;c) and the other, a more contemporary brass top to an overall button (1/2 in diameter) has the etched letters, "Fit Rite" (Figure 7-29;d). The other two metal buttons consist of a 2-hole sew-through of white metal cast in one piece with a sunken panel and painted gray (Figure 7-29;e); and, a heavily rusted 4-hole sew-through made in two pieces, probably of pressed steel.

3. Two marine shell, five complete and one incomplete freshwater shell buttons were all recovered from the saloon cellar, and one from the hotel vicinity. All bear the hard sheen of a machine-made shell button and were probably made after 1891, when freshwater shells found along the Mississippi were first used in the manufacture of such shell buttons (Luscomb 1967:25). Freshwater shell was most commonly used for utilitarian 2-hole and 4-hole sew-through buttons, which rarely had designs. Four buttons and the incomplete button in the collection, all with diameters of 1/2 in, are probably examples of utilitarian trimming buttons (Figure 7-29;g-k). Three are 2-hole sew-throughs with flat faces and recessed panels. The other two include a two-hole sew-through and a four-hole sew-through with sunken panels and uplifted edges. One of the marine shell buttons, (7/16 in diameter) a two-hole sew-through with a sunken panel and curved face, also probably falls in the category of utilitarian buttons (Figure 7-29;l). The last two buttons, represented by freshwater and marine shell are both two-hole sew-throughs and both have sunken fish-eye panels (Figure 7-29;m,n). Their diameters are, respectively, 5/8 in and 15/16 in, sizes for pearl buttons advertised by Sears and Roebuck (1902) for "street costumes and jackets."

MISCELLANEOUS

A few artifacts fall into miscellaneous categories of material types, including rubber, leather, newspaper and plastic. They are described below.

Eighteen leather strap, clothing/hat and shoe fragments were recovered from the saloon cellar fill and floor and one leather belt or strap fragment was recovered from the site surface. All appear to have been made from

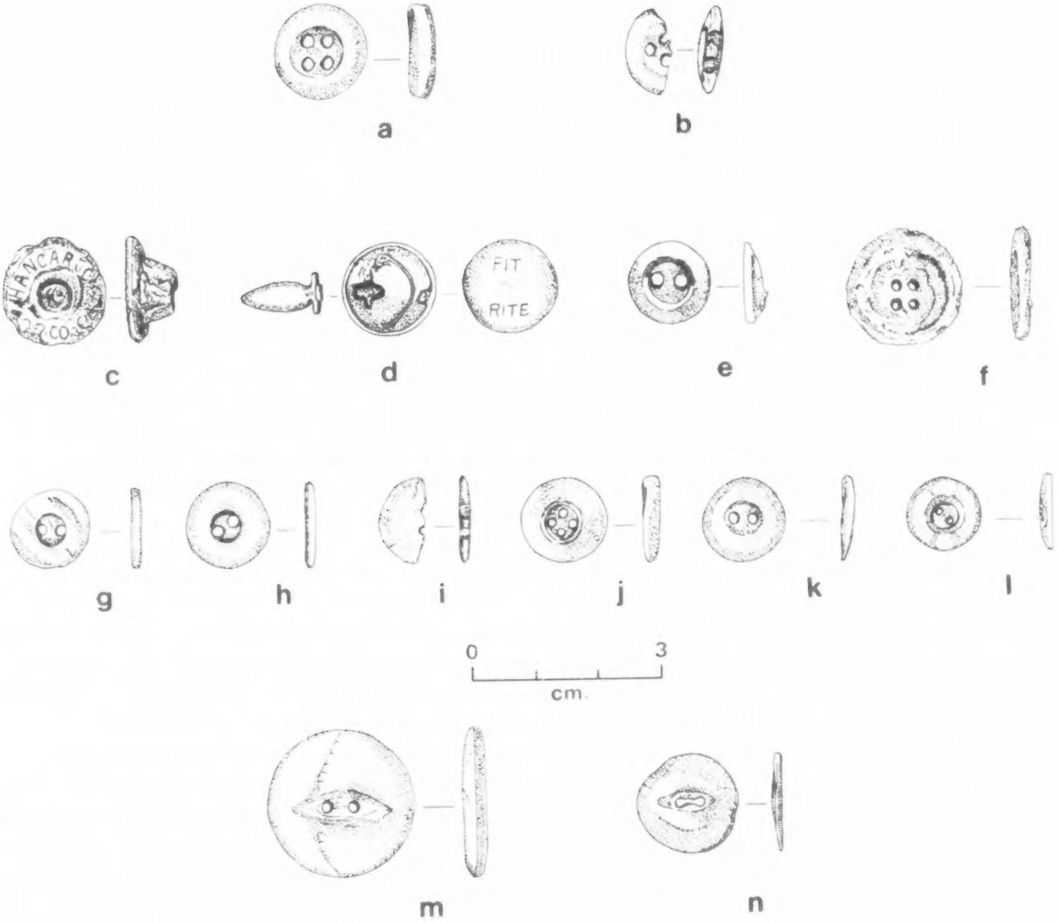

Figure 7-29. Buttons from Condon Ferry trading post (45-DO-202H).

a. Porcelain button
b. Procelain button
c. Metal overall button
d. Brass top to overall button
e. Gray painted white metal button cast in one piece
f. Pressed steel button made in two pieces
g-k. Freshwater shell utilitarian buttons
l. Marine shell utilitarian button
m. Marine shell button with sunken fish-eye panel
n. Freshwater shell button with sunken fish-eye panel.

commercially prepared cowhide and were in a deteriorated condition. The saloon cellar floor contained four fragments identified as harness strap fragments. Three have rivets attached and one fragment bears lightly etched parallel lines. Four fragments of lightweight leather for clothing and/or a hat, and two fragments of strap leather were also found on the floor.

The saloon cellar fill contained two leather strap fragments, one with holes that were probably part of a belt. The remaining six fragments are from shoes. One shoe sole has a nail attached and appears to be part of a man's work shoe. Four fragments of a lady's or child's shoe sole were also identified.

Four fragments of orange porous brick were recovered; two from the saloon cellar fill and two from the site surface. A chunk of gray caulking material was also recovered from the saloon cellar fill. Two pieces of plaster and two lumps of chalk were recovered from the root cellar fill.

Two hundred and eight-six fragments of window glass, including green, blue and clear pieces indicate that windows were replaced at Condon Ferry. The glass fragments were recovered from nearly all excavation and surface collection units but most were concentrated in the saloon cellar fill. Several fragments recovered from the floor of the saloon cellar had caulking attached.

One fragment of newspaper was recovered from the floor of the root cellar. Only the word "WATERVILLE" was readable. Six fragments of tarpaper were identified in the saloon cellar fill.

Thirty-four fragments of rubber were recovered, most of which are part of gaskets or rings for sealing canning jars (Figure 7-30). Eight rubber gasket fragments were identified on the root cellar floor and six were recovered from the floor of the saloon cellar floor. Twenty rubber fragments were also recovered from the saloon cellar floor.

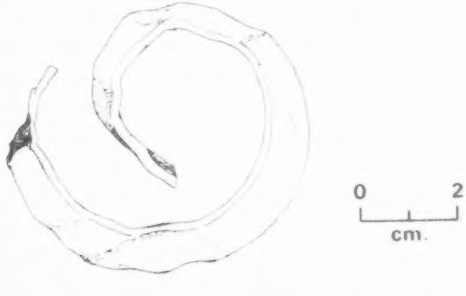

Figure 7-30. Rubber gasket for canning jar from Condon Ferry trading post (45-DO-202H).

Twenty-six carbon cylinders from inside porcelain electrical insulators were identified. Fourteen were recovered from the vicinity of the hotel, four from the saloon cellar fill, and eight from the surface.

One cork was recovered from the saloon cellar fill and four fragments of the plastic plate on a car battery were recovered from the saloon cellar fill. One circular plastic object with the printed words, "ALCAN PAT. PEND." was recovered from the hotel vicinity.

Eleven canvas wallpaper fragments were recovered from the saloon cellar floor, a whetstone fragment was recovered from the vicinity of the hotel, and the bottom of a wooden barrel or keg was recovered from the floor of the saloon cellar. The grain of the wood on the base of the barrel was horizontal; the wood composing the sides was vertical. Circumference of the barrel was 86 cm and the diameter was 32 cm.

INDIAN ARTIFACTS

Weber and Wyborney report that the area chosen for Condon Ferry was an established "Indian crossing" (1970), and that the Weber brothers have collected lithic artifacts there over the years (1970). During our investigation we found four cryptocrystalline flakes in the area between the saloon cellar and the hotel, in the saloon cellar fill, and at the hotel corner. A chunk of cryptocrystalline and a quartzite chunk were found near the corner of the hotel structure. They were found only outside buildings or in fill where they could accidentally have been incorporated, indicating that they are indeed the remains of earlier Indian use of the location.

8. MISCELLANEOUS SITES

One site in the project area was classified as miscellaneous because it did not fit into other site categories. 45-DO-270H consisted of a grave marker near the former location of Parsons Rapids (RM 567), an area associated with steamboating during the homesteading era.

45-DO-270H

This site, in Section 17, Township 30 North, Range 28 East, is a burial marker found on the south bank of the Columbia River, 900 ft downstream from RM 567, at an elevation of 1,050 ft above m.s.l. Vegetation near the marker is primarily sagebrush and low grasses (Munsell and Salo 1977). The gravesite is located beside a basalt erratic on a fairly steep slope facing the river. The marker is a simple steel plate welded to a steel post that had been driven into the ground. Printed on the front side of the marker with an embossed welding rod is the inscription "R M C 3/1/18."

From the beginning of the historic period in the project area, the Columbia River was hazardous to navigate. In 1811, David Thompson almost lost a voyageur in the Box Canyon Rapids (RM 556-557) and a few years later the event was remembered by Ross Cox when he ascended the river (Glover 1962:34; Stewart 1957:272). Letters from the fur trade era refer to boats, crews, and cargos lost in the Upper Columbia rapids. The hazards did not diminish with time and experienced rivermen were always few. When Lt. Symons of the U.S. Army Corps of Engineers traveled up the river, he had to recruit retired Hudson's Bay Company employees to navigate for his expedition and even with an expert crew, he found passage through the rapids of Nespelem Canyon to be the most dangerous and exciting section of the trip (Symons 1882:24). Symons' reconnaissance was undertaken to prepare the way for a new era in river transportation in the project area, and his report included recommendations for engineering projects to make the river safer for navigation.

In the early days, steamboats could navigate the rapids on the river, but only at certain times of the year when increased runoff caused the river level to rise covering the rapids. Even under the best of conditions, boats ran the river with great difficulty and at great risk. Nevertheless, during the homestead period, steamboating became the most economical means to move bulk cargos in and out of the area. Three steamboat landings were built within the project boundaries at Sellers Landing near Allen Bar, built by Delrio farmers to transport their wheat to outside markets (Fred Timm, personal communication 1977); at Stout's Landing near China Creek in the Alameda Flats area where there was a store and the beginnings of a sawmill (Fred and Harold Weber,

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personal communication 1977); and, at a landing at the mouth of the Nespelem River where ore from the Nespelem District mines was loaded for shipment to smelters on Puget Sound (Pardee 1918:59).

The rapids hindered river transportation and often steamboats were literally pulled upriver with the aid of cables. The attempt to clear Parsons Rapids for a steamboat crossing accounts for the grave marker. Parsons Rapids was one of the major obstacles for boats going to Alameda Flats and ports beyond. In order to improve the river for navigation, the steamboat Yakima was sent carrying dynamite to blast out the rapids. However, the venture ended in tragedy when the dynamite was prematurely detonated, killing three men Bicentennial Association 1976:79). The remains of these men were buried on the hillside above Parsons Rapids and commemorated by the single grave marker found at 45-DO-270H. Details of the burial are not preserved but it is doubtful the corpses could be recovered. A local story reports that only one hand was found for burial.

9. SUMMARY

Our investigations, the first systematic program of historic archaeological survey and excavation in the area, have yielded considerable information about the historic period. Previous historic archaeology in the region has focused on fur trade outposts--Forts Okanogan and Colville (Caywood 1954, Chance 1972, Grabert 1965, Grabert 1968, Saastamo 1971, Stout 1973, Swanson 1962). In the Chief Joseph Dam Project area, the fur trade period is represented only in Native American sites, while the rich record of Euroamerican sites begins with the mining era.

Placer mines are among the most common historic site types in the project area. However, they are difficult to date and interpret, as archaeological and documentary approaches to these tasks yield scant and conflicting data. The mining boom bringing the first major incursion of non-Indians into the area was in the mid to late 1800's. While contemporary observers like Symons and Trimble provide general information about mining, the earliest historic records dealing with specific locations are the 1907 survey maps and land claims records dating to after the turn of the century. Many of the mines were abandoned by the time the properties were surveyed or homesteaded. Archaeological investigations so far have contributed little more data. At most of the surveyed placer mines, no remains were found other than trenches, reservoirs, and other excavations connected directly with the mine. Structures and artifacts were scarce. The only mining equipment found, at 45-OK-277H, dates from mining during the 1950's. The surface archaeological evidence alone generally does not allow us to date the placer mines or to identify the cultural origin of the miners.

At this time we lack adequate information from either archaeological or documentary sources to evaluate interesting questions raised about the mining period: the richness of the diggings; the total number of mines over time; the ethnic origin of the miners; and the impact of the first major non-Indian incursion on the local Indian inhabitants. The likelihood of further work revealing associated buried refuse deposits which would allow the mines to be dated is uncertain.

One of the most interesting project results is the lack of conclusive archaeological evidence of Chinese miners, whom documentary evidence and informants clearly indicate were in the area. Local informants indicated that three sites, 45-DO-247, 45-DO-250H, and 45-DO-259H, were worked by Chinese. The sites yielded no evidence pertinent to determining the ethnicity of the miners. Two structures at 45-OK-182H were also attributed to the Chinese by local informants. In this case, excavation indicated that the structures date from the homesteading period and had no connection with Chinese miners. As discussed previously, the single fragment of a Chinese coin at one site is not conclusive evidence of Chinese presence.

The gravemarker commemorating a construction accident related to steamboat navigation and the three ferry sites are testimonials to the importance of the river to transportation routes, first as a means of transportation, and later as a barrier to land travel. Row ferries were established in the nineteenth century at several locations to transport miners and supplies to the mining districts. Of these, only the earliest, that established by Condit in 1885 (Condon's Ferry) is recorded as an archaeological site. Row ferries left few remains, as they did not require substantial structures on shore. Because it was the first ferry, and connected to extensive roads, Condon's Ferry supported a large commercial establishment, which did leave archaeological remains. The ferry structures at this site are those from the cable ferry which operated in the twentieth century. Both Hopkins and Pendell ferries started after 1910 as row ferries and were later converted to cable ferries.

Although the buildings at Condon Ferry were destroyed and many artifacts in the area had been collected by the landowners, the remains of the ferry apparatus and the artifact collection still give something of a picture of life at this lively settlement. Only at this site do we have evidence of decorative china and a collection of furniture fittings indicating a certain commercial sophistication. Modest by other standards, the little ferry settlement must have been a social center for those living near it. Condon Ferry proved to be the longest lived of the three ferry operations in the project area, but like the others it was not able to compete once a network of roads was built to accomodate automobile traffic. Today it is not possible to cross the Columbia by ferry between Chief Joseph and Grand Coulee dams.

The history of allotments in the project area is relatively well documented in legal records and by informants. However, the archaeological investigations reported here provide interesting supplementary information and raise at least one question which is best answered archaeologically. For most of the allotments, there is documentary evidence that the Indian owner did not occupy the place, but leased it to non-Indians. Here we found substantial developments, such as buildings, root cellars, a lilac bush at 45-OK-220H, and artificial terraces at 45-OK-224H. These improvements are similar to those found at homesteads, indicating that the lessees felt their leases were relatively permanent. Although historic records do not clearly indicate who occupied the Pakotas allotment, informants state that it was the Indian owner. The occupation investigated there (45-OK-174H and 45-OK-215H) is a substantial development, including buildings, root cellars, corrals, and a fruit tree. The surface features are very similar to those recorded for non-Indian homesteads and lease holdings. Subsurface investigations could be carried out to collect artifacts for comparison with artifact assemblages at non-Indian homestead sites, to see if the similarity extends to that level. As Mrs. Galler lived at the place until 1948, this clearly is one case where the allotment system did not lead to rapid transfer of land to non-Indian owners. The site is worthy of further archaeological and documentary investigation to determine why the fate of this allotment was different, and what light it sheds on the impacts of settlement on Indian culture.

The thirteen homesteads investigated within and near the project area suggest that homesteading was a marginal enterprise here just as it was throughout the region. The homesteads were modest in size and presumably in operation as well. All but one were attained by homestead entry patent. The one exception, the Colwell Homestead (45-OK-308H), was secured by a cash entry patent.

As the remains of the homesteads on the Douglas County side of the river were more complete than those on the Okanogan county side, they are more illustrative of pioneer life in the project area. These sites typically had a house, some outbuildings for animals, one or more root cellars, and often stands of deciduous trees. All the places were near the river and many were irrigated. Driftwood from the river was an important source of building timber. The little farms were probably intended to be self-sufficient although vegetable raising appears to have been undertaken as a commercial venture at one site, the Colwell Homestead. None of the homesteads appeared to have been prosperous, yet several of them were distinguished by what must have been marks of pride: the elegantly formed stone walls at the Winsheimer Homestead, the large, productive orchard at the Vernile Hopkins Homestead, and the stands of locust, willow and poplar planted at other places.

Whatever small footholds the homesteaders made were not long lasting. Only one farm (the Rod Hopkins Homestead) appears to have been used by its original owners for much more than a decade. The seven homesteads in Douglas County were all claimed within a year of each other (1913-1914) while the six in Okanogan County were taken during the 1920's and 1930's. According to local informants, none of the homesteads in Okanogan County was occupied after the 1940's and those in Douglas County, except for Rod Hopkins', appear to have been abandoned as early as the 1920's.

Although homesteading did not occur on the Okanogan County side as early as on the Douglas County side, we cannot say that formation of the reservation prevented non-Indians from settling Indian lands. The settlement of leased allotments may be considered de facto homesteading. By the time the reservation was open for homesteading in 1916, much of the prime, watered land may have already been occupied by lessees or Indians.

Our results demonstrate the various relationships which may hold between documentary and archaeological evidence in studying the historic period. In the case of placer mines, archaeological investigations failed to find conclusive evidence of the Chinese miners whose presence in the area is indicated by historic sources. In contrast, we can match individual features at 45-DO-202H to the detailed written descriptions of activities at Condon's Ferry, and use the latter to interpret the former. The equally rich archaeological record of homesteads allows us to describe material aspects of the more prosaic life of farmers and ranchers which did not attract the interest of historians. Archaeological investigations of allotments promise the possibility of examining empirically the history of individual allotments to test hypotheses which have been advanced about the failure of this system.

REFERENCES

The following federal, state, county and private records were consulted.

Assessor's Office Records, Okanogan County Courthouse (Okanogan, WA).

Baines Title Company Records (Okanogan, WA).

Bureau of Indian Affairs Allotment Records (Colville Indian Agency).

Douglas County Directory of 1915.

Fremont National Forest Records.

General Land Office, Bureau of Land Management Archives (Portland, OR).

Nespelem Real Estate Office Records (Nespelem, WA).

Office of Indian Affairs Federal Records Central Archives (Seattle, WA)

Okanogan County Courthouse Records.

U.S. Army Corps of Engineers, Seattle District, Archives.

Adams, W.H.
1976 **Silcott, Washington: ethnoarchaeology of a rural American community.** Unpublished Ph.D. dissertation, Department of Anthropology, Washington State University.

Adams, W.H., L.P. Gaw, and F.C. Leonhardy
1975 Archaeological investigations at Silcott, Washington: the data inventory. **Washington State University, Laboratory of Anthropology, Reports of Investigations** 53.

Barnes, F.C.
1980 **Cartridges of the World.** Follet Publishing Co., Chicago.

Barry, J.N.
1932 Spaniards in early Oregon. **Washington Historical Quarterly** 23(1):25-34.

Barthalomew, E.
1970 **1200 old medicine bottles.** Frontier Book Co., Fort Davis, Texas.

Beals, H.K.
1980 Chinese coins in six northwestern aboriginal sites. **Historical Archaeology** 14:58-72.

Bicentennial Association
1976 From pioneers to power, historical sketches of the Coulee Dam area. Bicentennial Association, Grand Coulee Dam, Washington.

Blackall, R.
1888 Builder's hardware - III. Nails. **American Architect and Building News** 24(660):72-74. Ticknor and Company, Boston.

Caywood, L.R.
1954 Excavations at two Fort Okanogan site, 1952. Manuscript on file, National Park Service, Region Four, San Francisco.

Chance, D.H.
1972 Fort Colville: the structure of a Hudson's Bay Company post, 1825 to 1871 and after. **University of Idaho Anthropological Research Manuscript Series** 4.

Chance, D.H., and J.V. Chance
1976 Kanaka Village/Vancouver Barracks 1974. **University of Washington, Office of Public Archaeology, Reports in Highway Archaeology** 3.

Clark, H.M.
1977 The tin can book. New American Library, New York.

Cruess, W.J.
1948 **Commercial fruit and vegetable products.** McGraw-Hill, New York.

Devner, K.
1968 **Patent medicine picture.** Printed by The Tombstone Epitaph, Tombstone, Arizona.

Durrenburger, E.P.
1965 Anderson's mill (41TV130): a historic site in Travis County, Texas. **Bulletin of the Texas Archaeological Society** 36:1-69.

Fontana, B.L., and J.C. Greenleaf
1962 Johnny Ward's ranch: a study in historic archaeology. **Kiva** 28 (1 and 2).

Glover, R. (editor)
1962 **David Thompson's narrative 1784.** Champlain Society, Toronto.

Godden, G.A.
1968 **The handbook of British pottery and porcelain marks.** Frederick A. Praeger Publishers, New York.

Grabert, G.F.
1965 Archaeological excavations at Fort Okanogan, Washington: a contribution to the ethno-history of the Sinkiaetk. Unpublished M.A. thesis, Department of Anthropology, University of Washington.

1968 The Astor Fort Okanogan. Department of Anthropology, University of Washington Reports in Archaeology 2.

Hildebrand, L.B.
1977 **Straw hats, sandals and steel.** The Washington State American Revolution Bicentennial Commission, Tacoma.

Hunt, C.B.
1959 Dating of mining camps with tin cans and bottles. **GeoTimes** 111(8):8-10,34.

Jermann, J.V., W.S. Dancey, R.C. Dunnell, and B. Thomas
1978 Chief Joseph Dam cultural resources management plan. Ms. on file, U.S. Army Corps of Engineers, Seattle District.

Karr, C.L., C.R. Karr
1951 **Remington handguns.** The Stackpole Co., Harrisburg.

Kingston, C.S.
1946 Samuel Wilbur Condit: frontiersman. **Pacific Northwest Quarterly** April 1946:129-141.

Kovel, R.M. and J.A. Kovel
1953 **Dictionary of marks-pottery and porcelain.** Crown Publishers, New York.

1982 **The Kovel's Bottle Price List.** Crown Publishers, New York.

Leonhardy, F.C.
1970 **An evaluation of the archaeological resources in the Rufus Woods area behind Chief Joseph Dam, Columbia River, Washington.** Report prepared for U.S. National Park Service, San Francisco. Washington State University, Laboratory of Anthropology.

Luscomb, S.C.
1967 **The collector's encyclopedia of buttons.** Crown Publishers, Inc., New York.

Lyman, R.L.
1975 Rufus Woods Lake Archaeological Salvage. Ms. on file, Chief Joseph Dam Cultural Resources Project.

1976 Exploratory archaeological research along Rufus Woods Lake, upper Columbia River region, north central Washington, 1975. **Washington State University, Washington Archaeological Research Center, Project Reports** 29.

MacKercher, V.M.
1979 **The woodworker's furniture construction/repair bible.** Tab Books, Blue Ridge Summit, Pennsylvania.

Meinig, C.
1968 **The Great Columbia Plain.** University of Washington Press, Seattle.

Miller, J.
1979 Ethnohistorical component of the Chief Joseph Dam burial relocation survey. Manuscript on file at the Corps of Engineers, Seattle District.

Mueller, C. and J. Olson
1968 **Small arms lexicon and concise encyclopedia.** Shooter's Bible Inc., South Hackensack, New Jersey.

Munsell, D.A., and L.V. Salo
1977 **Chief Joseph Dam cultural resources reconnaissance report, Rufus Woods Lake, Columbia River, Washington.** U.S. Army Corps of Engineers, Seattle District.

Munsey, C.
1970 **The illustrated guide to collecting bottles.** Hawthorn Books, Inc., New York.

Nelson, L.
1963 Nail chronology. **National Park Service, Technical Leaflet** 15

Osborne, H.D.
1949 **Appraisal of the archaeological resources of Chief Joseph Reservoir on the upper Columbia River.** Columbia Basin Project, River Basin Survey. Smithsonian Institution, Washington, D.C.

Osborne, H.D., R. Crabtree, and A. Bryan
1952 Archaeological investigations in the Chief Joseph Reservoir. **American Antiquity** 17:360-373.

Pardee, J.T.
1918 Geology and mineral resources of the Colville Indian Reservation, Washington. **U.S. Geological Survey, Bulletin** 677.

Paul, E. and A. Petersen
1974 **Collector's handbook to marks on porcelain and pottery.** Modern Books and Crafts, Inc., Green Farms, Connecticut.

Putnam, H.E.
1965 **Bottle identification.** Old Time Bottles, Salem, Oregon.

Ramsay, J.
1939 **American Potters and Pottery.** Colonian Press, Clinton, Mass.

Ramsey, G.R.
1973 **Postmarked Washington: Chelan, Douglas and Kittitas Counties.** The Wenatchee World.

Ray, V.F.
1977 **Ethnic impact of the events incident to federal power development on the Colville and Spokane Indian Reservations.** Report prepared for the Confederated Tribes of the Colville Reservation and the Spokane Tribe of Indians.

Ruby, R.H. and J.A. Brown
1974 **Ferryboats on the Columbia River.** Superior Publishing Company, Seattle.

Saastamo, S.
1971 The application of a functional typology in the analysis of artifacts from excavation of Old Fort Colville. Unpublished M.A. thesis, University of Idaho.

Serven, J.E.
1959 **Colt firearms.** Serven Books, Santa Ana, California.

Sprague, L.F.
1980 San Juan ceramics. Laboratory of Anthropology, University of Idaho, Moscow.

Stern, E.
1967 **Nails: definitions and sizes; a handbook for nail users.** Virginia Polytechnic Institute Research Division. Wood Research/Wood Construction Laboratory. Blacksburg, Virginia.

Stewart, E.
1957 **Washington: northwest frontier** (Vol. 1). Lewis Historical Publishing Company, New York.

Stout. H.
1973 Excavations at Fort Colvile: 1971. University of Idaho Anthropological Research Manuscript Series 10.

Swanson, E.H.
1962 Historic archaeology at Fort Okanogan, Washington, 1957. Tebiwa 5(1):1-5.

Symons, Thomas W.
1882 The upper Columbia River, and the Great Plain of the Columbia. **Senate Executive Document No. 186, 47th Congress, 1st Session.** Government Printing Office, Washington, D.C.

Thurgood, Col. R.J.
1979 **The complete encyclopedia of barbed wire.** Collector Books, Paducah, Kentucky.

Toulouse, J.H.
1971 **Bottle makers and their marks.** Thomas Nelson, Inc., New York.

Trimble, W.T.
1914 **Mining advances into the Inland Empire.** University of Wisconsin Press, Madison, Wisconsin.

Victor, G.
1967 I ran Wild Goose Bill's ferry. **Okanogan County Heritage** March 1967:13-17.

Weber, F.
1977 Transcript of taped interview with Fred Weber by Bryn Thomas 11/16/77.

Weber, J.F. and E.H. Wyborney
1970 "Wild Goose Bill" and his ferry. **The Pacific Northwesterner** 14(1):1-11 and 14(2):31-32.

Wilson, R.L.
1981 **Bottles on the western frontier.** University of Arizona Press in collaboration with Southwest Parks and Monuments Association.

APPENDIX A

The General Land Office conducted surveys in the project area preparatory to the instigation of the Tribal Land Allotment system on the Reservation and the granting of lands from the Public Domain to homesteaders. These excerpts from the field notes of several surveyors describe the townships and ranges where sites in this report were located. The notes are recorded as they stand, although spelling has been standardized.

General Description T29N R26E
45-OK-321H

This township contains but one variety of land, being mountainous and rough, on a general southerly slope from the high mountain plateau on the northwestern part to the Columbia River, being a descent of about 2000 ft. The soil is general light, ashy, basaltic soil to sandy along the Columbia River, rocky and gravelly, producing a light growth of grass. The township contains but little agricultural land and no settlement, without any stock grazing within its border, being high, rough and limited. The township is without timber, springs or ponds, adapted only for grazing. (Edward F. Sharp, U.S. Deputy Surveyor, 1908)

General Description T30N R26E
45-OK-319H

This township contains a variety of land, ranging from rolling mountainous plateau, to extremely rough mountainous land: the roughest part being from the high land to the Columbia River, and on the south and western parts of the township. The soil is basaltic in formation, producing rich, nutritious grasses, and will grow crops without irrigation. The township is without timber and rock is scattered over the whole surface more particular upon the rougher land: large basalt boulders are noticeable, scattered over the entire township, isolated of large dimensions and independent of other rock formations.

The interior and northern part contains agricultural land for grain crops, is without settlement or cultivation: large bands of horses and cattle graze over the land finding sufficient water from a few springs and mostly from numerous ponds. (Edward F. Sharp, U.S. Deputy Surveyor, 1907)

General Description T30N R27E
45-OK-308H

This township contains a variety of land, ranging from rolling mountainous plateau to extremely rough mountainous land; the roughest part being the descent from the high land to the Columbia River. The soil is basaltic formation, producing rich nutritious grasses and will produce crops without irrigation. The township is without timber; rock is scattered over the entire township, noticeably in isolated basalt boulders of large dimensions above ground and independent from other rock formation.

The township contains good agricultural land in the eastern and northern parts. Mr. Dooley, a white man, lives in sec. 17, having cattle under grazing permit.

The Columbia River runs in a deep canyon, westerly through the southern part of the township affording abundance of pure water, but is inaccessible for agricultural purposes and not practical for stock. There are a number of springs in the township, together with ponds afford sufficient water for present demands and with little development plenty of water for domestic use could be secured. There is no settlement or land cultivated in the Tp. (Edward F. Sharp, U.S. Deputy Surveyor, May 31, 1907)

45-DO-187H, 45-DO-272H

This township is mountainous and rocky. The highest elevation is along the westerly part of the S. boundary, from the south boundary it slopes northerly to the Columbia River. A descent of about 220 ft.

The soil is fertile and is covered with bunch grass.

The small benches and [unintelligible] portions are mostly homesteaded, upon which the settlers are raising crops, while the more mountainous portions provide good pasture. It is sparsely watered by numerous springs. (Robert F. Whitham, U.S. Deputy Surveyor, 1908)

General Description T30N R28E
45-DO-199H, 45-DO-200H, 45-DO-202H, 45-DO-203H, 45-DO-270H

This township contains several varieties of land, from rolling plains to mountainous slopes extending from the land breaks at the edge of what is known as Nes Pilem Canon [Nespelem Canyon], to the waters of the Columbia River. The rolling plains are about two thousand three hundred feet above the water of the Columbia River, forming a table land.

The soil of the table land consists of what is known as volcanic ash and is very rich and capable of producing good crops of wheat and rye, without irrigation.

The settlers raise good garden vegetables with very little irrigation, for which the water is taken from good wells, which are obtained by sinking from twenty five to forty feet.

The land in its native state is covered with a luxuriant growth of blue bunch grass, with scattering short sage brush, which is easily destroyed by plowing under when breaking sod. The plains are spotted with great boulders and rock heaps of basalt stone which appear to be loose or float rock, and not outcroppings of ledges, such boulders are from one to one thousand tons in size.

There are some alkali spots in this land. All the land on this plain embraced within this township is settled upon by thrifty industrious settlers, all the settlements of a permanent and substantial nature. At the edge of this plain the land breaks over a rim of basalt rock, this rim is from one to three hundred feet in height and almost perpendicular, from the foot of this rimrock blending into the rolling slopes that extend to the bluffs over looking the Columbia River. The basalt rock formation is from three to four hundred feet in thickness, beneath which is a granite formation, which has out croppings in many places, principally on the steep slopes, this granite formation appears to be about four hundred feet in thickness. There are several springs of pure water at the foot of the basalt rock bluff which have their source and supply in the contact between the two rock formations. The lands between the Columbia River and the rimrock [the project area] are dry and sandy and will not produce good crops without some irrigation. Mr. Webb Buck has a desert land claim in sec. 24 and 25 which he irrigated from a flowing spring and by storing water in ravines, from which he floods the lands in early summer. Mr. Charles Treefry also has a desert land claim in sec. 28 which he irrigates from a large flowing spring which rises near the corner of secs. 27-28-33 and 34.

The lands just above and adjacent to the bluffs over looking the Columbia River have very light sandy soil of a drifting nature and will not produce good crops without irrigation. These lands are covered with a dense growth of sage and chemeque brush with cactus in the more open places. All the springs rise near the foot of the rimrock flow a short distance and sink and do not rise again.

All the lands adjacent to the river are traversed with deep ravines, which are created by the melting snow rushing over the steep slopes to the Columbia River.

The bluffs along the river are very steep and broken by numerous sorts of washed out ravines and in many places are washed by the spring floods of the river. These bluffs range in height from one to four hundred feet.

Most all of the land on the table land is settled upon and below the rimrock there is a settler at every spring, that is one in each secs. 13, 23, 22, 21, 9, 10, 28, and 33.

There is fine timber under the bluff along the Columbia River bank and in secs. 15, 16, 21, and 22, below the bluff or rim rock. This timber is the limited supply of fuel that the settlers depend upon and will not last for many years. (Edward A. FitzHenry, U.S. Deputy Surveyor, 1905)

45-OK-180H, 45-OK-182H, 45-OK-277H, 45-OK-298H

This township is mountainous and rolling and rocky. The soil is sandloam with stone and rocky. The lakes and some springs are alkali and unfit for domestic use. The uplands grow bunch grass quite abundantly while the valleys grow some bunch grass but mostly an alkali grass.

Mr. Condit is the only settler in the township. (Edward F. Sharp, U.S. Deputy Surveyor, 1907)

General Description T30N R29E
45-DO-253H, 45-DO-255H, 45-DO-259H, 45-DO-261H, 45-DO-263H

This township is mountainous throughout. The highest elevation is on the south boundary about 2200 ft. above the Columbia River. The township slopes northerly and mostly lies on the break towards the Columbia River. It is sparsely watered from springs and small creeks. The land is fertile and is largely homesteaded. The settlers are growing wheat and raising stock. Where water is sufficiently abundant for irrigation orcharding bids fair to become an industry. (Robert F. Whitham, U.S. Deputy Surveyor, 1908)

General Description T30N R30E
45-DO-241H, 45-DO-210H, 45-DO-219H, 45-DO-226H, 45-DO-257H

This township is generally rough and broken. Of 2nd and 3rd rates [soils]. It is very good grazing being covered with nutritious grasses. There are a number of small lakes in the township. The Columbia River is navigable through the tp. being from 3/8 to 3/4 of a mile wide. The summits of the hills along the Columbia River are from one to two thousand feet above the river. There is a little scattering [of] Pine timber in sec. 16. The township is best adapted for grazing purposes, but there is some good farming land in the western portion. There is quite a number of miners cabins along the river. Mostly occupied by Chinese miners and Indians. Fruit planted on the side hills, near the river does well, and all kinds of crops can be raised without irrigation. (James L. Mann, U.S. Deputy Surveyor, 1883)

45-OK-174H, 45-OK-215H, 45-OK-220H, 45-OK-224H

This frac [sic] township is mountainous prairie. The soil of the southerly part is a heavy clay and alkali. Covered with greasewood [it] is worthless for agricultural purposes. The northerly part has a sandy loam soil, which produces bunch grass pasture and in spots will raise crops. The Indians occupy small tracts along creeks and springs, and by irrigating raise peaches and grapes. Precious minerals are reported in the north part. Numerous springs and brooks break out among the bluffs. The little Nespelem River flows through sec. 2, 3, and 4. (Robert F. Whitham, U.S. Deputy Surveyor, 1907)

General Description T31N R29E
45-DO-249H

This township is mountainous throughout and mostly excessively rocky. The northern part is timbered, the southern part is covered with bunch grass, sage brush, and greasewood. There is no agricultural land in the township except in very small spots. There are no settlers in the township except one or two Indians on Coyote Creek. It is very sparsely watered, a few springs break out among the mountains. (Robert F. Whitham, U.S. Deputy Surveyor, 1907)

45-DO-245H, 45-DO-247H, 45-DO-250H, 45-DO-252H

This frac [sic] township is mountainous and in [the] eastern portion very rocky.

The western portion is mountainous sagebrush and bunch grass land. A few springs give a scarce supply of water. (Robert F. Whitham, U.S. Deputy Surveyor, 1908)

General Description T31N R30E
45-OK-238H

This township is mountainous to rolling prairies. The eastern portion along the Nespelem River is a valley of rolling prairie. [The valley has] fertile soil, and is occupied by Indians. The Village of Nespelem is in this valley.

The northern portion is very mountainous and timbered, and spotted with small fertile valleys and bunch grass ridges.

The south westerly portion is mountainous and excessively rocky, produces bunch grass grazing. The township is watered by the Nespelem River and small springs and creeks.

Precious metals have been reported and prospective mining is extensively carried on. (Robert F. Whitham, U.S. Deputy Surveyor, 1907)

APPENDIX B:

LEGEND FOR SITE MAPS

LEGEND

1, 2	Feature number
⊏ ⁝ ✿	Stone—walls, foundations, cairns
◡	Root cellar
⬚	Board scatter
●	Post
-x---x-	Fence
====	Road
⬭	Depression
◌	Dump
■	Log building
▤	Frame building
☁	Vegetation
⊗	Privy
–···–	Shoreline
▲	Miscellaneous feature
◆	Primary datum
⌖	Secondary datum